

Message

From: Miller, Wynne [Miller.Wynne@epa.gov]
Sent: 10/30/2018 8:46:18 PM
To: Chism, William [Chism.Bill@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Tindall, Kelly [tindall.kelly@epa.gov]; Hawkins, Caleb [Hawkins.Caleb@epa.gov]; Costello, Kevin [Costello.Kevin@epa.gov]; Jones, Arnet [Jones.Arnet@epa.gov]
Subject: FW: XtendiMax use on DT Soy & Cotton
Attachments: The Scientific Basis for Understanding the Off-Target Movement Potential....pdf

The Bayer document ...

From: Keigwin, Richard
Sent: Tuesday, October 30, 2018 4:43 PM
To: Kaul, Monisha <Kaul.Monisha@epa.gov>; Miller, Wynne <Miller.Wynne@epa.gov>
Subject: FW: XtendiMax use on DT Soy & Cotton

I think this is the white paper.

From: MARVIN, THOMAS [AG/1920] [mailto:thomas.marvin@monsanto.com]
Sent: Friday, August 03, 2018 4:30 PM
To: Keigwin, Richard <Keigwin.Richard@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>
Subject: XtendiMax use on DT Soy & Cotton

All-

Please find attached a courtesy copy of a submission we made today in support of the continued registration of XtendiMax Herbicide for use on dicamba-tolerant soybeans and cotton (EPA Reg. 524-617). Please do not hesitate to contact me if there is anything we can address in advance of next Tuesday.

Thanks,

Tom

Tom Marvin
Director, Federal Regulatory Affairs
1300 I Street, NW
Washington, DC 20005
Cell: 202-676-7846
Desk: 202-383-2851

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Message

From: Kunickis, Sheryl - OSEC [Sheryl.Kunickis@osec.usda.gov]
Sent: 10/9/2018 11:56:50 AM
To: Bennett, Tate [Bennett.Tate@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]
Subject: Of interest

Soybean Herbicide Tolerant-Trait Systems for 2019 – Breaking it Down – DTN

Posted on October 3, 2018

By Emily Unglesbee DTN Staff Reporter

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Between new traits coming to market and the recent ag mergers, soybean seed catalogs are as thick as they are confusing this year.

Depending on your seed retailer of choice, growers have up to five different herbicide-tolerant trait platforms to pick from for the 2019 season — some new, some merely under new ownership.

That's a lot of bean seed to digest, so we're here to help, with a breakdown of the latest information and availability of these weed control systems.

1. ROUNDUP READY 1 & 2

The original glyphosate-tolerant Roundup Ready 1 soybeans went off patent in 2015, which means individuals can grow them and save them for re-use as long as the seed has no other trait or varietal patents.

Although Monsanto, now Bayer, has phased RR1 out of its seed stock, some institutions such the universities of Missouri and Arkansas have done breeding work with this older trait and developed varieties using it. Growers should check with their local universities and state seed associations for information on RR1 availability.

First introduced in 2009, Roundup Ready 2 soybeans are still under patent. Although Bayer is transitioning to the RR2 Xtend platform, many seed companies still sell RR2 varieties and they will be available in 2019.

2. RR2 XTEND

Xtend crop acreage estimates clocked in at 40 million to 50 million acres in 2018. The RR2 Xtend soybean trait, first developed by Monsanto, now belongs to Bayer, but will be available from a variety of seed companies via licensing agreements in 2019. It allows growers to spray **dicamba** and glyphosate postemergence over the top of the crop.

However, the only dicamba herbicides legal for postemergence use with this system — **XtendiMax**, **FeXapan** and **Engenia** — remain in regulatory limbo. EPA issued a two-year conditional registration for the three dicamba products and those labels expire this fall.

Official complaints of off-target dicamba movement this year were lower in some states compared to 2017, thanks to a rise in soybean acres planted to dicamba-tolerant soybeans this year, stringent new spray restrictions and some weather situations that prevented spraying. However, some Midwestern states reported more injury totals, and the trait also remains plagued by complaints of dicamba injury to non-soybean acres, such as specialty crops and trees.

The situation prompted some seed company executives and state pesticide regulators to ask for even more restrictive regulations on the use of dicamba herbicides in 2019, beyond the 2018 label adjustments. EPA was expected to make a decision on their registration in August, but has yet to do so.

“Our goal is to make a decision in time for growers to make informed seed purchase decisions for the next planting season,” the agency told DTN in an email.

3. LIBERTYLINK

LibertyLink soybean technology confers tolerance to **glufosinate**(Liberty) herbicide. Bayer and MS Technologies collaborated to bring this technology to growers in 2009. For the 2019 seed sales season, the technology now rests in the hands of BASF, who purchased it from Bayer as part of anti-trust remediation.

LibertyLink has been steadily gaining market share as glyphosate-resistant weeds spread across the South and Midwest, said Jody Wynia, the U.S. soybean lead for BASF. “That’s one of the reasons why it’s grown to almost 20% of the soybean market share and why it’s grown for five years in a row,” he said.

“This technology has been around for a while, and it’s a really good one for growers in today’s market with low commodity prices,” he noted, thanks to lower seed price and the availability of generic glufosinate herbicides.

The product will be available from **BASF’s Credenz soybean platform**, as well as many independent seed companies, Wynia said. “[There are] about 78 licensees that support LibertyLink technology,” he said.

4. GT27 & LIBERTYLINK GT27

GT27 soybeans, developed by MS Technologies, **Bayer and Mertec LLC**, confer tolerance to glyphosate and a new HPPD/Group 27 herbicide. The trait will be commercially available in 2019, but the corresponding herbicide, **ALITE 27** (previously Balance Bean), is not yet registered for use in soybeans.

That means growers who plant this trait can’t legally apply a HPPD herbicide over the top of it, Wynia said. Furthermore, Bayer developed ALITE 27 (Balance Bean) for pre-emergence use only, so postemergence use in soybeans will not be an option even once EPA approves it.

While some independent seed companies are offering GT27 soybeans as a standalone product, BASF is focusing on the commercial launch of the LibertyLink GT27 soybean stack, which will offer tolerance to glyphosate, glufosinate and ALITE 27. Although ALITE 27 isn’t yet available, the stack will allow growers to control weeds postemergence in soybeans with both glyphosate and glufosinate for the first time.

LL GT27 will be available in 2019 under BASF’s Credenz soybean platform, as well as other seed companies, Wynia said. The stack isn’t licensed to major seed companies like Corteva or Syngenta yet, but independent seed companies like Beck’s Hybrids, Stine Seed and Peterson Farms Seed will carry it.

The 13 available Credenz varieties with LL GT27 will range in maturity from group 0 to group 4.5, he added.

Growers will likely be tempted to spray generic HPPD herbicides on soybeans with the GT27 trait if ALITE 27 is not available in 2019, said Purdue weed scientist Bill Johnson. "There will be a lot of temptations to use it, especially if generics are lower cost than [other burndown herbicides]," he said.

Wynia urged growers not to do so. "I think we've been really clear with positioning of this product that LibertyLink GT27 soybeans aren't tolerant to all HPPD herbicides on market today, so there is a big risk of injury there," he said. "That's why we will have a unique product specifically for use on these soybeans."

5. ENLIST E3 SOYBEANS

Waiting in the wings are **Enlist E3 soybeans**, developed by **Dow AgroSciences and MS Technologies**, and now under the umbrella of **Corteva Agriscience**.

Enlist E3 soybeans contain a single molecular stack that makes them tolerant to 2,4-D, glufosinate and glyphosate. Another type of Enlist soybeans, Enlist Soy + RR2Y, also confers tolerance to these herbicides, but Corteva is focusing its 2019 commercial offerings on Enlist E3 soybeans, said Mike Dillon, global soybean portfolio lead for Corteva.

Neither Enlist E3 nor Enlist Soy + RR2Y are cleared for commercialization yet, as both traits are awaiting some final international import approvals.

Corteva is prepared to make Enlist E3 a major competitor in the soybean market once those approvals come through, Dillon said.

If we were cleared for a commercial launch tomorrow, we could place products that are locally adapted from the North Dakota Red River Valley down to Mississippi and from the Rockies to the Atlantic," Dillon said. The company has spent a couple years ramping up seed production in maturity groups 0 to 5.8, with an ultimate goal of 0 to 7, he added.

In 2018, some farmers in **Indiana, Illinois and Ohio** planted Enlist E3 soybeans within a stewarded closed-loop system, as well as seed production acres, Dillon said. Corteva has not yet decided what sort of opportunities growers will have to do stewarded production of Enlist E3 soybeans in 2019.

"We'd like to get some feedback after harvest and updated information on regulatory approvals first," he said.

Emily Unglesbee can be reached at Emily.unglesbee@dtm.com

<https://agfax.com/2018/10/03/soybean-seed-choices-for-2019-breaking-it-down-dtm/>

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Message

From: Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]
Sent: 8/29/2018 9:13:31 PM
To: Keller, Kaitlin [keller.kaitlin@epa.gov]
CC: Goodis, Michael [Goodis.Michael@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Bennett, Tate [Bennett.Tate@epa.gov]
Subject: Re: Dicamba - Request from the Vice President

Thanks! Looks good, I'll pass along.

Sent from my iPhone

On Aug 29, 2018, at 5:09 PM, Keller, Kaitlin <keller.kaitlin@epa.gov> wrote:

Charlotte,

Mike and I just spoke and made a few additional tweaks.

Ex. 5 Deliberative Process (DP)

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Clean version attached. Let me know if any additional changes are needed.

Thanks,
Kaitlin

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Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

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Sent: Wednesday, August 29, 2018 4:57 PM
To: Keller, Kaitlin <keller.kaitlin@epa.gov>
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See attached revised version. Note that I pulled together the state bullet from the AAPCO letter that came in today (also attached), which may not represent broader feedback from the states.

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Thanks. Can you <div style="border: 1px dashed black; padding: 2px; display: inline-block;">Ex. 5 Deliberative Process (DP)

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Begin forwarded message:

From: "Keller, Kaitlin" <keller.kaitlin@epa.gov>
Date: August 29, 2018 at 2:41:10 PM EDT
To: "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>
Cc: "Beck, Nancy" <Beck.Nancy@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>
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Sent: Wednesday, August 29, 2018 1:40 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Bolen, Derrick <bolen.derrick@epa.gov>
Cc: Keller, Kaitlin <keller.kaitlin@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Hi - looks like Ryan would like to be on call too. Can you schedule around his calendar as well. Also, Kaitlin can you have a one pager dusted off for me to look at about 4pmish? Thanks.

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From: "Jackson, Ryan"
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Date: August 29, 2018 at 1:29:41 PM EDT
To: "Bertrand, Charlotte"
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Cc: "Bennett, Tate"
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I can be on the call as well. Is there an update I can get on what we plan to present today?

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 12:39 PM
To: Jackson, Ryan

<jackson.ryan@epa.gov>

Cc: Bennett, Tate

<Bennett.Tate@epa.gov>; Baptist, Erik

<Baptist.Erik@epa.gov>; Beck, Nancy

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registration decision. We are going to
set something up for tomorrow. Tate is
joining the call. Charlotte

From: Hickey, Jonathan

P. EOP/OVP

[mailto:Jonathan.P.Hickey@ovp.eop.gov]

Sent: Wednesday,
August 29, 2018 9:03
AM

To: Goodis, Michael

<Goodis.Michael@epa.gov>

Cc: guilaran.you-
ting@epa.gov; Keigwin,
Richard

<Keigwin.Richard@epa.gov>; Hickey, Jonathan
P. EOP/OVP

<Jonathan.P.Hickey@ovp.eop.gov>

Subject: Introduction &
Question

Hi Mike,

Sending you and
Richard & Quilaran this
note to introduce
myself and see if we
could schedule a call to
help us here at OVP
understand an inquiry

the Vice President
recently recieved.

My name is Jon Hickey
and I recently joined
the Vice President's
Domestic Policy team.
Part of my portfolio is
Environment. I look
forward to working
with you and your
team!

The Vice President
recently received an
inquiry from a
constituent concerned
about Dicamba and the
upcoming expiration of
the Xtendimax with
Vapor Grip Technology
Label. Would you have
time to discuss this at
some point today?

Also, if there is a time
when you (and/or
whoever you feel
appropriate from your
team) would have time
to meet perhaps next
week just to make face-
to-face introductions
and perhaps to get an
overview of the
Pesticides Program?

Thanks!

Best regards,

Jon

Jon Hickey

Office of the Vice
President

Special Advisor for
Domestic Policy

(202)395-1659

<18-001-0391.pdf>

<Dicamba 8.29.2018.docx>

<Dicamba 8.29.2018 (1).docx>

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Attachments: Dicamba 8.29.2018 (1).docx

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Subject: Introduction & Question

Hi Mike,

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My name is Jon Hickey and I recently joined the Vice President's Domestic Policy team. Part of my portfolio is Environment. I look forward to working with you and your team!

The Vice President recently received an inquiry from a constituent concerned about Dicamba and the upcoming expiration of the Xtendimax with Vapor Grip Technology Label. Would you have time to discuss this at some point today?

Also, if there is a time when you (and/or whoever you feel appropriate from your team) would have time to meet perhaps next week just to make face-to-face introductions and perhaps to get an overview of the Pesticides Program?

Thanks!

Best regards,

Jon

Jon Hickey

Office of the Vice President

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<Dicamba 8.29.2018.docx>

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Sent: 10/19/2018 3:15:10 PM
To: Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]; Keigwin, Richard [Keigwin.Richard@epa.gov]
Subject: Fwd: Uncertainties

Flag: Flag for follow up

In response to discussion with Erik re: uncertainty in relying on various datasets to inform dicamba.

Sent from my iPhone

Begin forwarded message:

From: "Odenkirchen, Edward" <Odenkirchen.Edward@epa.gov>
Date: October 19, 2018 at 11:12:31 AM EDT
To: "Echeverria, Marietta" <Echeverria.Marietta@epa.gov>
Subject: Uncertainties

The goal of the initial step of and ESA effects determination (no effect/may affect) is to evaluate effects that are reasonably expected to occur. The effects determination is concerned with effects to individual organisms belonging to the federally listed threatened or endangered species. EPA's stated policy regarding effects determinations is to rely on organism response endpoints that inform the fitness of individuals of a species and that the principal determinants of fitness are survival and reproduction. EPA has stated in policy that measures of growth, survival, an reproduction output, and any other effect endpoint from scientifically credible studies quantifiably related to growth, survival, and reproduction are to be considered in effects determinations.

Evaluating the impact of uncertainties on the effects determination for differing data sets of plant response to dicamba in the field must first start with the certainties that can inform what is reasonable:

1. Dicamba exposures in plants produce dose-dependent effects in the form of reduced growth, reduced reproductive yield, and visual signs of injury.
2. The mechanism of auxin mimicry for dicamba is responsible for each of the observed effects above.
3. A variety of field and laboratory measurements demonstrate a variable but quantifiable relationship between visual signs of injury and plant growth as well as plant reproduction output (yield).
4. The growth and yield responses of plants such as soybean to dicamba are sensitive at different growth stages, with vegetative growth an appropriate response measure for plants in active vegetative growth phases (V-Stage) and reproduction (yield) measures for plants in reproductive phase (R-stage)
5. Dicamba may move from treated field by spray drift (wind direction at time of application is important) and volatile drift (wind direction at any time volatilization occurs is important)
6. Available dicamba flux data show variable volatile emissions of dicamba under varying field conditions.

Two different approaches to the use of field data measuring dicamba response in plants are being considered:

Approach 1. Reliance on field studies reporting of measurements of plant growth (height) in response to dicamba exposure with distance from treated field, and

Approach 2. Reliance on field studies reporting measurement of plant visual signs of injury in response to dicamba exposure with distance from the treated field coupled with utilization of a mathematical factor to relate levels of visual injury to reasonably expected levels of effects on growth(height) and reproduction (yield). Where direct measurements of height or yield are made and appropriate for the growth stage they are used to supplant the visual signs information.

The robustness of each approach can be evaluated with respect to how well the approach considers and accounts for the six lines of evidence discussed above

Approach 1: All studies only measured plant height, no yield measurements, and all studies were for V stage plants. There is one study available to measure plant height with the formulation Engenia. This study looked at a total of four transects. For Xtendimax there are three studies available constituting eight transects in all.

1. Does the approach consider a full suite of growth and reproduction endpoints known to occur in response to dicamba?

The approach is only based on measurements of height. Reliance on this approach involves the following uncertainty/limitation:

No quantitative evaluation of the effect of dicamba on plant reproduction output. Therefore the approach cannot reasonably demonstrate that reproduction effects will not occur in a listed species at any given distance off the treated field.

2. Does the approach consider the relative sensitivity of different growth stages to appropriate endpoints important to the effects determination

The approach provides measures of plant height at the V-stage of plants. The approach does not consider reproduction effects to plants at the R stage. Given that threatened or endangered plants can be reasonably expected to be in either V stages or R stages throughout the growing season and throughout plausible dicamba use periods this approach includes a major uncertainty/limitation:

No quantitative evaluation of effects at R stage plants. Therefore this approach does not consider effects reasonably expected for dicamba exposure to listed plants in R stage during dicamba use.

3. Does the approach consider a variety of environmental and field conditions?

With a total of only one field test available for Engenia under this approach it can be confidently stated that the approach cannot account for any field variability in dicamba movement or in plant response. Reliance on this approach involves the following uncertainty/limitation for Engenia:

A single field study cannot account for the variability of dicamba movement and attendant effects for listed species reasonably expected to be located across a variety of landscapes proximal to sites of dicamba use.

With three field tests, covering only three states, available for Xtendimax under this approach it can be expected that interfiled variability in conditions is accounted for to some limited extent. However, the small number of studies does not likely represent the reasonable extent

of field conditions encountered across the proposed registration and across areas where listed species co-occur, account for any field variability in dicamba movement or in plant response. Reliance on this approach involves the following uncertainty/limitation for Xtendimax:

The approach can consider field variability to some extent but cannot robustly account for the variability of dicamba movement and attendant effects for listed species reasonably expected to be located across a variety of landscapes proximal to sites of dicamba use.

4. Does the approach consider the effects of wind direction during and after dicamba use on the transport of dicamba off-field?

Only one study provided a transect that was in some direction other than downwind from treatment. Therefore the approach cannot provide measures of effects from volatile emissions other than on the day of application. Reliance on this approach involves the following uncertainty/limitation:

The approach cannot provide reliable information on the potential for dicamba volatile emissions to produce off site effects on plants at any distance off the treated field. Therefore it provides no evidence of consideration of the potential for effects to listed plants from the reasonable expectation of volatile emissions on any days other than application.

5. Does the approach consider visual signs of injury in any quantitative way?

The approach inherently disregards all data relative to observations of plant injury at any distance. Reliance on this approach involves the following uncertainty/limitation:

Despite visual signs of injury being reported from a variety of dicamba effects studies included in this approach no attempt is made to account for them in any way so the approach does not present a qualitative or quantitative consideration of these effects in the context of survival, growth AND reproduction effects to listed species.

Approach 2: Over a dozen studies measured visual signs of injury for both V and R stage plants. Forty-five separate transects were measured in all (21 for Engenia and 24 for Xtendimax). Where height measures were simultaneously measured these were included in the results. All levels of VSI were related to thresholds of height or yield effects using a distribution analysis of VSI relationships on over multiple published effects studies with simultaneous measures at appropriate growth stages.

1. Does the approach consider a full suite of growth and reproduction endpoints known to occur in response to dicamba?

The approach is only based on a robust suite of VSI relationships to measures of height and yield. Reliance on this approach involves the following uncertainty/limitation:

While multiple studies provided a distribution of VSI relationships the height, there is variability inherent in the relationships. There is uncertainty as to the extent that any given listed species VSI to height or reproduction would be encompassed by the available range in results used in the analysis. Focusing on a reasonable upper bound measure may limit the extent of this uncertainty's impact on an effects determination. With selection of the relationship protectively made, the approach can reasonably

demonstrate that reproduction or height effects will not occur in a listed species at a given distance off the treated field.

2. Does the approach consider the relative sensitivity of different growth stages to appropriate endpoints important to the effects determination?

The approach provides information on of plant height at the V-stage of plants and plant yield on R stage plants. Given that threatened or endangered plants can be reasonably expected to be in either V stages or R stages throughout the growing season and throughout plausible dicamba use periods this approach addresses this issue robustly but includes the uncertainty listed above.

3. Does the approach consider a variety of environmental and field conditions?

With a total of 45 transects across 10 states and with more than a dozen different field sites field sites tested it can be confidently stated that this approach encompasses far greater regional and condition variability than Approach 1.

The approach does consider field variability to the maximum extent of available data to account for the variability of dicamba movement and attendant effects for listed species reasonably expected to be located across a variety of landscapes proximal to sites of dicamba use.

4. Does the approach consider the effects of wind direction during and after dicamba use on the transport of dicamba off-field?

The approach includes measurements along transects in multiple off-wind directions for multiple field sites.

The approach can provide information on the potential for dicamba volatile emissions to product off site effects on plants at any distance off the treated field. Therefore it provides evidence of consideration of the potential for effects to listed plants from the reasonable expectation of volatile emissions on any days other than application.

5. Does the approach consider visual signs of injury in any quantitative way?

The approach inherently disregards all data relative to observations of plant injury at any distance. Reliance on this approach involves the following uncertainty/limitation discussed in item 1 above.

The approach provides a reasonable and quantitative consideration for the best available information pertaining to visual signs of injury.

Message

From: Strauss, Linda [Strauss.Linda@epa.gov]
Sent: 10/3/2018 2:02:34 PM
To: Beck, Nancy [Beck.Nancy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]
Subject: Just FYI - RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

From: Daguillard, Robert
Sent: Wednesday, October 03, 2018 9:58 AM
To: Strauss, Linda <Strauss.Linda@epa.gov>
Cc: Sisco, Debby <Sisco.Debby@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>; Courtnage, Robert <Courtnage.Robert@EPA.GOV>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Subject: RE: Use this one - sorry RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Thanks all. The reporter spoke to me this morning and pushed hard for an interview, but I told her that was unlikely to happen. I'll forward the following for approval.

Cheers, R.

Robert Daguillard
Office of Media Relations
U.S. Environmental Protection Agency
Washington, DC
+1 (202) 564-6618 (O)
+1 (202) 360-0476 (M)

From: Strauss, Linda
Sent: Wednesday, October 03, 2018 9:51 AM
To: Daguillard, Robert <Daguillard.Robert@epa.gov>
Cc: Sisco, Debby <Sisco.Debby@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>; Courtnage, Robert <Courtnage.Robert@EPA.GOV>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Subject: FW: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Here you go, Robert! We would like to give this written statement vs. take the interview. Thanks.

EPA considers all studies and our analysis gives weight to high quality and well-documented studies. The Agency looks at the all of the evidence to inform our decision. EPA registered dicamba (with restrictions on its use) but placed time limits on the registration to allow the agency to either let it expire or to make the necessary changes in the registration if there are problems with resistant weeds or pesticide drift.

EPA continues to receive information from stakeholders regarding the use of dicamba for over-the-top applications. EPA will use all available evidence when evaluating registrations for over-the-top use of dicamba. We expect to make a decision in the near future.

From: Daguillard, Robert
Sent: Monday, October 1, 2018 4:07 PM
To: Strauss, Linda <Strauss.Linda@epa.gov>; Dunton,

Cheryl <Dunton.Cheryl@epa.gov>; Courtnage, Robert
<Courtnage.Robert@EPA.GOV>; Sisco, Debby
<Sisco.Debby@epa.gov>; Han, Kaythi
<Han.Kaythi@epa.gov>; Dinkins, Darlene
<Dinkins.Darlene@epa.gov>

Subject: LINDA/OPP: Center for Investigative Reporting
- Dicamba - deadline request to speak with Reuben
Barris

**CENTER FOR INVESTIGATIVE
REPORTING**

LIZA GROSS

DDL 10/3, WEDNESDAY

Good afternoon everyone,

I assume we'll want to send written responses? Let
me know if you want to discuss.

Thanks, R.

++++
+++++

OK, great. Here's what I'd like to discuss:

When does EPA expect to decide whether to
reregister dicamba for the dicamba-resistant
crops?

In the initial registration of Xtendimax, Monsanto's dicamba product (M1768), EPA relied on humidome studies, which the literature shows are not good proxies for what goes on in the field (and new studies by university scientists support). In addition, the field studies were done under conditions and in locales that would not reflect conditions in the midsouth. What convinced EPA that these studies were enough to allow a compound with a history of volatility, especially under conditions in the midsouth, on the market?

Academic scientists, including David Mortensen, had warned that pesticides act much differently when you increase amounts and acreage, and that doing so with dicamba, which is responsible for more drift injuries (along with 2,4D) than any other herbicides, would lead to disaster. Why were these concerns, based on rigorous science, not heeded?

Many academic scientists I spoke with said that they advised EPA officials in calls and meetings that low volatility formulations are not the same as no volatility and can still cause serious harm. They said label changes wouldn't solve the problem. How did the EPA decide to allow Monsanto and other registrants to submit label changes that scientists said no one can follow?

Many people in Missouri and Arkansas have sustained serious economic losses and are getting no relief from their state agricultural departments. What role does EPA see for themselves in this situation? What message do you have for people who blame EPA for approving a product that has caused them so much harm?

That's mostly what I want to discuss.

Thanks, Robert.

Dear press officers,

I'm working on a story about dicamba for Reveal, from the Center for Investigative Reporting, and need to speak with Reuben Barris or another official in the herbicide branch. Please let me know when I can speak to someone.

Thank you.

Sincerely,

Liza Gross

Liza Gross

Journalist/editor based in the San Francisco Bay Area

The Science Writers' Investigative Reporting Handbook

[Available on Amazon](#)

www.lizagross.com

@lizabio on Twitter

liza.m.gross on Skype

+1.510.525.2494 (office)

+1.510.295.9391 (cell/Signal)

--

Sent from my phone. Pardon the typos.

Message

From: Strauss, Linda [Strauss.Linda@epa.gov]
Sent: 10/3/2018 1:52:57 PM
To: Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Dunton, Cheryl [Dunton.Cheryl@epa.gov]
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Got it

From: Bertrand, Charlotte
Sent: Wednesday, October 03, 2018 9:52 AM
To: Strauss, Linda <Strauss.Linda@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

I recommend removing the word 'easily' from the first paragraph.

From: Strauss, Linda
Sent: Wednesday, October 03, 2018 9:48 AM
To: Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Got it. Thanks.

From: Baptist, Erik
Sent: Wednesday, October 03, 2018 9:44 AM
To: Beck, Nancy <Beck.Nancy@epa.gov>; Strauss, Linda <Strauss.Linda@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Suggested edits below:

EPA considers all studies and our analysis gives weight to high quality and well-documented studies. The

Ex. 5 Deliberative Process (DP)

EPA registered dicamba (with restrictions on its use) but placed time limits on the registration to allow the agency to either let it expire or to easily make the necessary changes in the registration if there are problems with resistant weeds or pesticide drift.

EPA continues to receive information from stakeholders regarding the use of dicamba for over-the-top applications. EPA will use all available evidence when evaluating registrations for over-the-top use of dicamba. We expect to make a decision in the near future.

Erik Baptist

Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
1201 Constitution Ave., NW
Washington, DC 20460
(202) 564-1689

baptist.erik@epa.gov

From: Beck, Nancy
Sent: Wednesday, October 3, 2018 9:35 AM
To: Strauss, Linda <Strauss.Linda@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

I'm ok. Erik/Charlotte?

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator, OCSP
P: 202-564-1273
beck.nancy@epa.gov

From: Strauss, Linda
Sent: Wednesday, October 3, 2018 8:18 AM
To: Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>
Subject: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Incoming below. They are looking for an interview but we propose a general statement back.
Response:

EPA considers all studies and our analysis gives weight to high quality and well-documented studies. **Ex. 5 Deliberative Process (DP)**

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To: Strauss, Linda <Strauss.Linda@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Courtnage, Robert <Courtnage.Robert@EPA.GOV>; Sisco, Debby <Sisco.Debby@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>
Subject: LINDA/OPP: Center for Investigative Reporting

ED_005570B_00074371-00002

- Dicamba - deadline request to speak with Reuben Barris

**CENTER FOR INVESTIGATIVE
REPORTING**

LIZA GROSS

DDL 10/3, WEDNESDAY

Good afternoon everyone,

I assume we'll want to send written responses? Let me know if you want to discuss.

Thanks, R.

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++++

OK, great. Here's what I'd like to discuss:

When does EPA expect to decide whether to reregister dicamba for the dicamba-resistant crops?

In the initial registration of Xtendimax, Monsanto's dicamba product (M1768), EPA relied on humidome studies, which the literature shows are not good proxies for what

goes on in the field (and new studies by university scientists support). In addition, the field studies were done under conditions and in locales that would not reflect conditions in the midsouth. What convinced EPA that these studies were enough to allow a compound with a history of volatility, especially under conditions in the midsouth, on the market?

Academic scientists, including David Mortensen, had warned that pesticides act much differently when you increase amounts and acreage, and that doing so with dicamba, which is responsible for more drift injuries (along with 2,4D) than any other herbicides, would lead to disaster. Why were these concerns, based on rigorous science, not heeded?

Many academic scientists I spoke with said that they advised EPA officials in calls and meetings that low volatility formulations are not the same as no volatility and can still cause serious harm. They said label changes wouldn't solve the problem. How did the EPA decide to allow Monsanto and other registrants to submit label changes that scientists said no one can follow?

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That's mostly what I want to discuss.

Thanks, Robert.

.....
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Dear press officers,

I'm working on a story about dicamba for Reveal, from the Center for Investigative Reporting, and need to speak with Reuben Barris or another official in the herbicide branch. Please let me know when I can speak to someone.

Thank you.

Sincerely,

Liza Gross

Liza Gross

Journalist/editor based in the San Francisco Bay Area

The Science Writers' Investigative Reporting Handbook

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+1.510.525.2494 (office)

+1.510.295.9391 (cell/Signal)

--

Sent from my phone. Pardon the typos.

Message

From: Keller, Kaitlin [keller.kaitlin@epa.gov]
Sent: 8/29/2018 7:27:05 PM
To: Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]
CC: Baptist, Erik [Baptist.Erik@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Bennett, Tate [Bennett.Tate@epa.gov]; Goodis, Michael [Goodis.Michael@epa.gov]
Subject: RE: Dicamba - Request from the Vice President
Attachments: 18-001-0391.pdf; Dicamba 8.29.2018.docx

See attached revised version. Note that I pulled together the state bullet from the AAPCO letter that came in today (also attached), which may not represent broader feedback from the states.

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 2:52 PM
To: Keller, Kaitlin <keller.kaitlin@epa.gov>
Cc: Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bennett, Tate <Bennett.Tate@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Thanks. Can you Ex. 5 Deliberative Process (DP) million acres...). On the status - it's a little too much on external messaging. Let's remove the second bullet and trim the third. I recommend replacing with more specifics that we are examining particular restrictions on application timing, ... I also think we need to add some specifics about what we have heard from states. I've added Erik, Nancy, Mike and Tate for their input. I'm going to be out of pocket soon driving. Thanks for doing this so quickly!
Sent from my iPhone

Begin forwarded message:

From: "Keller, Kaitlin" <keller.kaitlin@epa.gov>
Date: August 29, 2018 at 2:41:10 PM EDT
To: "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>
Cc: "Beck, Nancy" <Beck.Nancy@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>
Subject: RE: Dicamba - Request from the Vice President

Here's a first cut. Pulled background from previous materials and current status mostly from Cheryl's draft desk statement, the only new info is the updated complaints (from AAPCO's spreadsheet).

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 1:58 PM
To: Keller, Kaitlin <keller.kaitlin@epa.gov>
Subject: Re: Dicamba - Request from the Vice President

The person we are briefing will need to start from scratch - has no background on what Dicamba is.

Sent from my iPhone

On Aug 29, 2018, at 1:55 PM, Keller, Kaitlin <keller.kaitlin@epa.gov> wrote:

Yes--If you are okay with the desk statement Cheryl sent at 7am this morning, I will pull from that to update the language on decision-making

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 1:40 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Bolen, Derrick <bolen.derrick@epa.gov>
Cc: Keller, Kaitlin <keller.kaitlin@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Hi - looks like Ryan would like to be on call too. Can you schedule around his calendar as well. Also, Kaitlin can you have a one pager dusted off for me to look at about 4pmish?
Thanks.

Sent from my iPhone

Begin forwarded message:

From: "Jackson, Ryan" <jackson.ryan@epa.gov>
Date: August 29, 2018 at 1:29:41 PM EDT
To: "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>
Cc: "Bennett, Tate" <Bennett.Tate@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bolen, Brittany" <bolen.brittany@epa.gov>
Subject: RE: Dicamba - Request from the Vice President

I can be on the call as well. Is there an update I can get on what we plan to present today?

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 12:39 PM
To: Jackson, Ryan <jackson.ryan@epa.gov>
Cc: Bennett, Tate <Bennett.Tate@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bolen, Brittany <bolen.brittany@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Ryan - just wanted to make you aware of this request from the office of the VP for an update on our Dicamba registration decision. We are going to set something up for tomorrow. Tate is joining the call.
Charlotte

From: Hickey, Jonathan P. EOP/OVP
[mailto:Jonathan.P.Hickey@ovp.eop.gov]
Sent: Wednesday, August 29, 2018 9:03 AM
To: Goodis, Michael <Goodis.Michael@epa.gov>
Cc: guilaran.you-ting@epa.gov; Keigwin, Richard <Keigwin.Richard@epa.gov>; Hickey, Jonathan P. EOP/OVP <Jonathan.P.Hickey@ovp.eop.gov>
Subject: Introduction & Question

Hi Mike,

Sending you and Richard & Quilaran this note to introduce myself and see if we could schedule a call to help us here at OVP understand an inquiry the Vice President recently recieved.

My name is Jon Hickey and I recently joined the Vice President's Domestic Policy team. Part of my portfolio is Environment. I look forward to working with you and your team!

The Vice President recently received an inquiry from a constituent concerned about Dicamba and the upcoming expiration of the Xtendimax with Vapor Grip Technology Label. Would you have time to discuss this at some point today?

Also, if there is a time when you (and/or whoever you feel appropriate from your team) would have time to meet perhaps next week just to make face-to-face introductions and perhaps to get an overview of the Pesticides Program?

Thanks!

Best regards,

Jon

Jon Hickey

Office of the Vice President

Special Advisor for Domestic Policy

(202)395-1659

Message

From: Strauss, Linda [Strauss.Linda@epa.gov]
Sent: 10/3/2018 1:47:54 PM
To: Baptist, Erik [Baptist.Erik@epa.gov]; Beck, Nancy [Beck.Nancy@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Dunton, Cheryl [Dunton.Cheryl@epa.gov]
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Got it. Thanks.

From: Baptist, Erik
Sent: Wednesday, October 03, 2018 9:44 AM
To: Beck, Nancy <Beck.Nancy@epa.gov>; Strauss, Linda <Strauss.Linda@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Suggested edits below:

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Ex. 5 Deliberative Process (DP)

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EPA continues to receive information from stakeholders regarding the use of dicamba for over-the-top applications. EPA will use all available evidence when evaluating registrations for over-the-top use of dicamba. We expect to make a decision in the near future.

Erik Baptist
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
1201 Constitution Ave., NW
Washington, DC 20460
(202) 564-1689
baptist.erik@epa.gov

From: Beck, Nancy
Sent: Wednesday, October 3, 2018 9:35 AM
To: Strauss, Linda <Strauss.Linda@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

I'm ok. Erik/Charlotte?

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator, OCSPP
P: 202-564-1273
beck.nancy@epa.gov

From: Strauss, Linda

Sent: Wednesday, October 3, 2018 8:18 AM

To: Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>

Subject: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

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Sent: Monday, October 1, 2018 4:07 PM

To: Strauss, Linda <Strauss.Linda@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Courtnage, Robert <Courtnage.Robert@EPA.GOV>; Sisco, Debby <Sisco.Debby@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>

Subject: LINDA/OPP: Center for Investigative Reporting
- Dicamba - deadline request to speak with Reuben Barris

**CENTER FOR INVESTIGATIVE
REPORTING**

LIZA GROSS

DDL 10/3, WEDNESDAY

Good afternoon everyone,

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Thanks, R.

++++
++++

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Thank you.

Sincerely,

Liza Gross

Liza Gross

*Journalist/editor based in the San
Francisco Bay Area*

The Science Writers' Investigative Reporting
Handbook

Available on Amazon

www.lizagross.com

@lizabio on Twitter

liza.m.gross on Skype

+1.510.525.2494 (office)

+1.510.295.9391 (cell/Signal)

--

Sent from my phone. Pardon the typos.

Message

From: Beck, Nancy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=168ECB5184AC44DE95A913297F353745-BECK, NANCY]
Sent: 8/3/2018 12:58:44 PM
To: Bennett, Tate [Bennett.Tate@epa.gov]
Subject: FW: First Move: Trump Auto Plan Oil Fans • Fish-Counting Tech • Weedkiller Drifts Again

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator, OCSPP
P: 202-564-1273
M: 202-731-9910
beck.nancy@epa.gov

From: Keller, Kaitlin
Sent: Friday, August 3, 2018 8:47 AM
To: Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>
Subject: FW: First Move: Trump Auto Plan Oil Fans • Fish-Counting Tech • Weedkiller Drifts Again

FYI. Bloomberg's Dicamba article is out.

<https://news.bloombergenvironment.com/environment-and-energy/dicamba-woes-return-this-year-but-patterns-are-shifting-1>

Dicamba Woes Return This Year but Patterns Are Shifting

Posted Aug. 3, 2018, 7:01 AM

By [Tiffany Stecker](#)

- Illinois, Indiana, see more dicamba damage than last year
- Monsanto met with Andrew Wheeler ahead of big EPA decision

Evidence of damage from a fast-drifting herbicide is again appearing across agricultural states this summer, as the EPA grapples with deciding whether to continue to allow the product to be used.

Last year, the 1960s-era weedkiller dicamba was reformulated and sold under a new label by Monsanto Co., BASF SE, and DowDupont. The new herbicides were made to work with genetically engineered soybeans and cotton that don't wilt when sprayed with dicamba. But thousands of farmers who didn't grow the GMO crops saw their soybean plants wither last summer as dicamba drifted off neighboring fields.

The nation is on track for another year of damage to soybeans—which are particularly sensitive to dicamba—as well as trees, ornamental plants, fruits and vegetables, and other vegetation. As of July 15, more than 1 million acres of soybeans had been damaged and 605 investigations had been [launched](#), according to Kevin Bradley, a professor in the University of Missouri's Integrated Pest Management program who tracks state reports of drift damage.

Early reports suggest that complaints have risen in the Midwest but have dropped in the Midsouth. In Illinois, the number of acres affected so far this year has almost outpaced last year's totals, University of Illinois agronomist Aaron Hager told Bloomberg Environment.

Indiana is in a similar situation to Illinois. About half of the 221 drift complaints so far this year are allegedly for dicamba, David Scott, a pesticide administrator with the Indiana State Chemist Office, told Bloomberg Environment. In 2017, the tally for the entire year was 128 dicamba drift complaints. Scott said the increase may be attributable to this year's earlier planting start.

MONSANTO MEETS WITH WHEELER

The damage reports come months before the Environmental Protection Agency must decide whether to renew the two-year registration of Monsanto's, BASF's and DowDupont's herbicides—called XtendiMax, Engenia, and FeXapan—or let them expire. Monsanto was one of the first companies to pay EPA Acting Administrator Andrew Wheeler a visit, according to Wheeler's schedule, one week after he replaced Scott Pruitt as head of the agency on July 6.

"We have met with the Acting Administrator as part of our routine outreach to the agency," Monsanto spokeswoman Charla Lord told Bloomberg Environment in an email.

The EPA could act in the next few weeks. Through a spokeswoman, Office of Pesticide Programs Director Rick Keigwin told Bloomberg Environment that the agency wants to make a decision before growers make seed purchase decisions for the next planting season. Farmers typically make those plans in the fall.

Monsanto and BASF are keen to defend their technology, which they say is less prone to drifting off-target than older versions of dicamba. They argue that any problems with drift can be fixed with better training. But detractors—including several agricultural researchers that advise farmers—disagree, saying the products are fundamentally flawed.

Scientists are cautious not to predict an outcome on the overall extent of damage by the end of the year. One reason is that the adoption of Monsanto's genetically engineered seeds that resist dicamba has increased.

Monsanto expects a doubling of acres for dicamba-tolerant soybeans and cotton, or more than 55 million acres of dicamba-tolerant soybeans and cotton this year. Some see this spike in adoption is seen as an attempt by farmers to protect their crops from drifting dicamba.

"The story has not been written completely this year," Andrew Thostenson, a pesticide program specialist with North Dakota State University Extension, told Bloomberg Environment.

The three companies also have trained 96,000 growers and applicators in 27 states in compliance with new EPA restrictions announced last year.

'TOO MANY' DICAMBA COMPLAINTS?

Nationwide, the number of damaged soybean acres is dropping. By July 25, 2017, state agriculture agencies were investigating 1,411 dicamba injury allegations, and university weed scientists nationwide estimated that about 2.5 million acres of soybeans had been injured with dicamba, Bradley explained in his July 15 update. At this point in 2018, there are about 600 investigations and about 1.1 million acres of allegedly affected soybeans.

"We do believe that farmers are talking to each other. We believe that they are working together, and that has contributed to us receiving less calls," BASF spokeswoman Odessa Hines told Bloomberg Environment.

Eight states—including big soybean-growing states like Iowa—did not report the estimated dicamba damage this year. Bob Hartzler, an extension weed specialist for Iowa State University, said he did not have the resources to do a survey to assess what percentage of reported acres are affected by dicamba drift. He did not feel comfortable submitting a number for Iowa.

“I don’t have a feel for if it’s worse or better than last year, but it’s definitely too many,” Hartzler told Bloomberg Environment. “There are too many of them where it appears that the applicator did everything right and they still have issues.”

Arkansas, a hotbed of dicamba drift complaints last year, implemented a ban on the herbicide this summer from April 16 through Oct. 31. The drop in complaints has been precipitous, according to state Department of Agriculture spokeswoman Adriane Barnes. As of July 27, 179 investigations into alleged dicamba drift were reported, compared with nearly 800 last year.

“It’s not the same situation at all this year,” Barnes told Bloomberg Environment. But University of Arkansas scientists estimate about 400,000 acres of dicamba damage to soybeans have occurred despite the ban.

“There’s definitely been illegal use,” Jason Norsworthy, a weed scientist with the University of Arkansas, told Bloomberg Environment. Norsworthy was one of a handful of scientists last year to conduct independent studies on the new dicamba herbicides, finding they were more likely to vaporize and travel off-field than the companies claimed.

Last year in July, the state reported 850,000 acres of damage.

LAWSUITS ABOUND

Farmers who suffered losses due to dicamba are filing lawsuits around the country that are being consolidated in federal court. On Aug. 1, attorneys filed two complaints in the multidistrict litigation against the pesticide companies. The first complaint makes the argument that farmers were dealt significant crop damage when the dicamba herbicides were sold. The other complaint alleges that Monsanto violated antitrust laws because the dicamba drift forces farmers to buy Monsanto’s dicamba-tolerant seeds In Re: Dicamba Herbicides Litigation, E.D. Mo., MDL No. 2820, 8/1/18.

Four nonprofit organizations also have sued the EPA for violating the Federal Insecticide, Fungicide, and Rodenticide Act and the Endangered Species Act when it granted a two-year registration for the dicamba herbicides. Oral arguments in the U.S. Court of Appeals for the Ninth Circuit case are scheduled for Aug. 29 in Seattle in National Family Farm Coalition v. EPA, 9th Cir., No. 17-70196, 6/20/18.

From: Bloomberg Environment - Environment & Energy Report [<mailto:bloomberg@bna.com>]

Sent: Friday, August 03, 2018 8:14 AM

To: Keller, Kaitlin <keller.kaitlin@epa.gov>

Subject: First Move: Trump Auto Plan Oil Fans • Fish-Counting Tech • Weedkiller Drifts Again

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Trump Auto Plan Oil Fans • Fish-Counting Tech • Weedkiller Drifts Again



By [Chuck McCutcheon](#)

The Trump administration's [plan to roll back](#) fuel-economy and vehicle pollution standards drew gripes from Democrats, some Republicans, environmentalists, and consumer groups.

But the proposal pleased one key Trump constituency—oil producers.

Several energy companies lobbied on the issue, including Marathon Petroleum Corp., Koch Companies Public Sector LLC and refiner Andeavor. The administration's proposal translates into a projected 500,000 extra barrels of U.S. crude oil demand per day by 2030—about 2 percent to 3 percent of projected consumption.

"It's a meaningful increase in U.S. oil consumption," says Trevor Houser, a partner with the Rhodium Group research firm. "In terms of policy interventions that the U.S. government has taken or could take, this is certainly the most significant."

The extra oil that would be consumed as a result of the proposed changes could cost consumers an additional \$193 billion to \$236 billion cumulatively between now and 2035, according to a Rhodium Group analysis.

Massachusetts Democratic Sen. Ed Markey complained that the plan is "really all about petroleum."

Bloomberg News' [Ari Natter](#) and [Jennifer Dlouhy](#) have more details in a [story out today](#).

FISH COUNTING: Technology has helped anglers catch more fish. Now it's helping to more accurately count them.

As companies rush to develop increasingly high-resolution image applications, scientists and government agencies are poised to unlock a treasure trove of data on some of world's most valuable fisheries. Scientists—and fishermen—are eager to reel in that data because the numbers provide the foundation for a host of federal and state rules governing how many fish are allowed to be caught.



Mediterranean bream fish swim in the Mediterranean Sea near Marseille in southern France in July.
Photographer: Boris Horvat/AFP/Getty Images

As it now stands, much of the data that fisheries managers rely on is still collected using 150-year-old methods—trawl nets or hooks to catch fish, count them, and measure them by hand. And that data doesn't provide a full census of what's swimming around in the ocean.

Follow [Adam Allington](#) on Twitter for updates and watch for his story this weekend.

DICAMBA DRIFT RETURNS: The weedkiller dicamba caused considerable damage to crops last year when it drifted across numerous agricultural states. Now it's happening again.

Early reports suggest that complaints have dropped in the South but risen in the Midwest. In Illinois, the number of acres affected so far this year has almost outpaced last year's totals, while Indiana is in a similar situation.

The damage reports come months before the EPA must decide whether to renew the two-year registration of Monsanto's, BASF's, and DowDupont's herbicides or let them expire.

[Tiffany Stecker](#) has more details in a [story](#) out today.

OTHER STORIES WE'RE COVERING

- The [Texas Environmental Superconference](#) features discussions on Superfund, environmental issues in the oil patch, and settlement money from Volkswagen's emissions-cheating scandal. Paul Stinson is covering.
- China eliminated taxes on domestically produced electric vehicles and cut in half taxes on some small-engine vehicles in a move that is expected to encourage demand of relatively clean cars, John Butcher writes in a [story](#) published last night.

- The EPA staked out the next battleground over federal ozone pollution requirements despite its decision not to change the standards set in 2015 at this time.

QUOTE OF THE DAY

“California will fight this stupidity in every conceivable way possible.”

—California Gov. Jerry Brown, blasting the Trump administration’s plan to roll back federal fuel economy standards and end California’s ability to set its own, tougher standards.

AROUND THE WEB

- One of President Trump’s major donors agreed in April to pay \$10 million to Trump’s then-attorney Michael Cohen for help in completing unfinished nuclear reactors in Alabama, the Wall Street Journal reports.
- Two Democratic senators are asking the Trump administration to update them by next week on the president’s interagency task force on lead exposure and calling for a comprehensive strategy.
- The government’s official death toll in Puerto Rico from Hurricane Maria, already criticized for being far lower than the actual number of deaths, was questioned again in new research estimating that between 1,006 and 1,272 died—15 to 20 times above the official count.
- The EPA’s internal watchdog is looking at the agency’s and Texas’ air quality monitoring and related activities after Hurricane Harvey.

TODAY’S EVENTS

- **All Day • Green Energy • U.S.-China Green Energy Council** holds summit in Burlingame, Calif.

An incomplete version of this story was previously published. The complete version has been republished here.

For all of today’s Bloomberg Environment headlines, visit Environment & Energy Report

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Message

From: Beck, Nancy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=168ECB5184AC44DE95A913297F353745-BECK, NANCY]
Sent: 11/22/2018 3:27:35 AM
To: Bennett, Tate [Bennett.Tate@epa.gov]
Subject: Re: **FOR IMMEDIATE RELEASE: Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season

No worries. Have a great holiday!!

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
P: 202-564-1273
beck.nancy@epa.gov

On Nov 21, 2018, at 10:24 PM, Bennett, Tate <Bennett.Tate@epa.gov> wrote:

They called and read their statement to me last week. I had a chance to speak with them when AAW was in MO. Sorry- meant to relay!

On Nov 21, 2018, at 7:12 PM, Beck, Nancy <Beck.Nancy@epa.gov> wrote:

Thanks. I didn't expect that one.

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
P: 202-564-1273
beck.nancy@epa.gov

On Nov 21, 2018, at 7:10 PM, Subramanian, Hema
<Subramanian.Hema@epa.gov> wrote:

Hema Subramanian
Office of the Administrator
U.S. Environmental Protection Agency
Washington, DC
office: (202) 564-5041
cell: 202-815-0472

Begin forwarded message:

From: "Jones, Doug" <jones.doug@epa.gov>
Date: November 21, 2018 at 3:18:46 PM EST
To: "Subramanian, Hema"
<Subramanian.Hema@epa.gov>
Subject: FW: **FOR IMMEDIATE RELEASE:
Missouri Department of Agriculture issues
statement on Dicamba products for the 2019
growing season

FYI

Doug Jones | Agriculture Advisor | Office of the
Regional Administrator | U.S. EPA Region 7 | 11201
Renner Blvd | Lenexa, KS 66219 | (913) 551-7592

From: Green, Jamie
Sent: Wednesday, November 21, 2018 2:10 PM
To: Robichaud, Jeffery <Robichaud.Jeffery@epa.gov>;
Huffman, Diane <Huffman.Diane@epa.gov>; Jones,
Doug <jones.doug@epa.gov>; Carey, Curtis
<Carey.Curtis@epa.gov>
Subject: Fwd: **FOR IMMEDIATE RELEASE: Missouri
Department of Agriculture issues statement on Dicamba
products for the 2019 growing season

Sent from my iPhone

Begin forwarded message:

From: "Bailey, Paul"
<Paul.Bailey@mda.mo.gov>
Date: November 21, 2018 at 8:29:07
AM CST
To: "Green, Jamie"
<Green.Jamie@epa.gov>, 'Janet
Hou' <janet.hou@basf.com>,
"SIMPSON, DUANE J [AG/1005]"
<duane.simpson@bayer.com>
Subject: FW: **FOR
IMMEDIATE RELEASE:
Missouri Department of
Agriculture issues statement on
Dicamba products for the 2019
growing season

FYI – MDA news release.

Paul Bailey
Director, Plant Industries
Missouri Department of Agriculture

P.O. Box 630
Jefferson City, MO 65102
573-751-2462
Paul.Bailey@mda.mo.gov

From: Missouri Department of
Agriculture
<MDA@public.govdelivery.com>
Sent: Tuesday, November 20, 2018 5:22
PM
To: Bailey, Paul
<Paul.Bailey@mda.mo.gov>
Subject: **FOR IMMEDIATE RELEASE:
Missouri Department of Agriculture
issues statement on Dicamba products
for the 2019 growing season

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MISSOURI AGRICULTURE

news

For Immediate Release: Nov. 20, 2018

Media Contact: Sami Jo Freeman,
samijo.freeman@mda.mo.gov, (573) 751-2613

Missouri Department of Agriculture statement on Dicamba products for 2019 growing season

(JEFFERSON CITY, Mo.) – Today, the Missouri Department of Agriculture announced it will not pursue Special Local Needs (24c) labels for the Engenia, FeXapan and XtendiMax for the 2019 growing season. This announcement follows the Environmental Protection Agency's (EPA) decision to extend the registration of these three Dicamba products for another two years with additional safeguards.

The Missouri Department of Agriculture appreciates the thoughtful process taken by EPA in the re-registration process, and our staff looks forward to working with industry partners, agriculture organizations and academia to ensure growers are aware of and follow the new federal requirements.

"We understand it is a challenging task to balance the interests of producers across the United States, but the EPA has worked diligently with registrants to provide a balanced approach," said Missouri Director of Agriculture Chris Chinn.

EPA has enhanced the previous labels and put in place additional safeguards in an effort to increase the success and safe use of the product in the field.

The two-year registration is valid through Dec. 20, 2020, and includes the following:

- Only certified applicators may apply Dicamba over-the-top (only those working under the supervision of a certified applicator may make applications)
- Prohibit over-the-top application of Dicamba on soybeans 4 weeks after planting or up until the R1 growth stage (first bloom), whichever comes first
- Prohibit over-the-top application of Dicamba on cotton 60 days after planting
- For cotton, limit the number of over-the-top applications from two
- For soybeans, the number of over-the-top applications remains at one
- Applications will be allowed only from one hour after sunrise to two hours before sunset
- In counties where endangered species may exist, the downwind buffer will remain at 110 feet and there will be a new 57-foot buffer on the other sides of the field (the 110-foot downwind buffer applies to all applications, not just in counties where endangered species exist)
- Enhanced tank clean-out instructions for the entire system
- Enhanced label to improve applicator awareness on the impact of pH on the potential volatility of Dicamba
- Label clean up and consistency to improve compliance and enforceability

The new label instructions and requirements will be covered in the new Dicamba or auxin-specific training available online through the University of Missouri Extension, or through training offered by Bayer, BASF and their respective products.

For more information about the Missouri Department of Agriculture, visit the Department online at Agriculture.Mo.Gov.

###



Questions? [Contact us](#)

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This email was sent to paul.bailey@mda.mo.gov using GovDelivery Communications Cloud on behalf of: Missouri Department of Agriculture · 1616 Missouri Boulevard · Jefferson City, Missouri 65102

Message

From: Beck, Nancy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=168ECB5184AC44DE95A913297F353745-BECK, NANCY]
Sent: 8/29/2018 9:50:17 PM
To: Bennett, Tate [Bennett.Tate@epa.gov]
Subject: Re: Dicamba - Request from the Vice President

Yep.

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
P: 202-564-1273
M: 202-731-9910
beck.nancy@epa.gov

On Aug 29, 2018, at 10:39 PM, Bennett, Tate <Bennett.Tate@epa.gov> wrote:

Good timing then

On Aug 29, 2018, at 5:15 PM, Beck, Nancy <Beck.Nancy@epa.gov> wrote:

Our drop dead date will be driven by when the registrations expire. One is definitely in November so we will need to decide by then.

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
P: 202-564-1273
M: 202-731-9910
beck.nancy@epa.gov

On Aug 29, 2018, at 9:27 PM, Bennett, Tate <Bennett.Tate@epa.gov> wrote:

If not too late, I would add to the very last bullet "(by November/ December, barring any complications)." I have been told by many ag trades we realistically have until October before decisions have to be made, and this gives us some wiggle room. I'd imagine the VP's office will want to know what our realistic timing is. Just my two cents!

- EPA intends to have a decision on the registration in time to support viable soybean and cotton seed purchases for the 2019 growing season (by November/ December, barring any complications)

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 2:52 PM
To: Keller, Kaitlin <keller.kaitlin@epa.gov>
Cc: Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bennett, Tate <Bennett.Tate@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Thanks. Can you add a **Ex. 5 Deliberative Process (DP)** importance/use of this herbicide (over 55 ? million acres...). On the status - it's a little too much on external messaging. Let's remove the second bullet and trim the third. I recommend replacing with more specifics that we are examining particular restrictions on application timing, ... I also think we need to add some specifics about what we have heard from states. I've added Erik, Nancy, Mike and Tate for their input. I'm going to be out of pocket soon driving. Thanks for doing this so quickly!
Sent from my iPhone

Begin forwarded message:

From: "Keller, Kaitlin" <keller.kaitlin@epa.gov>
Date: August 29, 2018 at 2:41:10 PM EDT
To: "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>
Cc: "Beck, Nancy" <Beck.Nancy@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>
Subject: RE: Dicamba - Request from the Vice President

Here's a first cut. Pulled background from previous materials and current status mostly from Cheryl's draft desk statement, the only new info is the updated complaints (from AAPCO's spreadsheet).

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 1:58 PM
To: Keller, Kaitlin <keller.kaitlin@epa.gov>
Subject: Re: Dicamba - Request from the Vice President

The person we are briefing will need to start from scratch - has no background on what Dicamba is.

Sent from my iPhone

On Aug 29, 2018, at 1:55 PM, Keller, Kaitlin <keller.kaitlin@epa.gov> wrote:

Yes--If you are okay with the desk statement Cheryl sent at 7am this

morning, I will pull from that to update the language on decision-making

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 1:40 PM
To: Goodis, Michael
<Goodis.Michael@epa.gov>; Bolen, Derrick <bolen.derrick@epa.gov>
Cc: Keller, Kaitlin
<keller.kaitlin@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Hi - looks like Ryan would like to be on call too. Can you schedule around his calendar as well. Also, Kaitlin can you have a one pager dusted off for me to look at about 4pmish? Thanks.

Sent from my iPhone

Begin forwarded message:

From: "Jackson, Ryan"
<jackson.ryan@epa.gov>
>
Date: August 29, 2018
at 1:29:41 PM EDT
To: "Bertrand, Charlotte"
<Bertrand.Charlotte@epa.gov>
Cc: "Bennett, Tate"
<Bennett.Tate@epa.gov>, "Baptist, Erik"
<Baptist.Erik@epa.gov>
, "Beck, Nancy"
<Beck.Nancy@epa.gov>
, "Bolen, Brittany"
<bolen.brittany@epa.gov>
Subject: RE: Dicamba - Request from the Vice President

I can be on the call as well. Is there an update I can get on what we plan to present today?

From: Bertrand, Charlotte

Sent: Wednesday,
August 29, 2018 12:39
PM

To: Jackson, Ryan
<jackson.ryan@epa.gov>
>

Cc: Bennett, Tate
<Bennett.Tate@epa.gov>; Baptist, Erik
<Baptist.Erik@epa.gov>
; Beck, Nancy
<Beck.Nancy@epa.gov>
; Bolen, Brittany
<bolen.brittany@epa.gov>

Subject: Fwd: Dicamba
- Request from the Vice
President

Ryan - just wanted to
make you aware of this
request from the office
of the VP for an update
on our Dicamba
registration
decision. We are going
to set something up for
tomorrow. Tate is
joining the call.
Charlotte

From:
Hickey,
Jonatha
n P.
EOP/O
VP
[mailto:
Jonathan.P.Hickey@eop.vp.eop.gov]
Sent:

Wedne
sday,
August
29,
2018
9:03

AM
To:
Goodis,
Michael
<Goodis.Michael@epa.gov>
Cc:
guilara.n.you-ting@epa.gov;
Keigwin,
Richard
<Keigwin.Richard@epa.gov>;
Hickey,
Jonathan P.
EOP/O
VP
<Jonathan.P.Hickey@eopvp.eop.gov>
Subject:
Introduction & Question

Hi
Mike,

Sending
you and
Richard
&
Quilara
in this
note to
introduce

myself
and see
if we
could
schedules a call
to help
us here
at OVP
understand
and an
inquiry
the
Vice
President
recently
received.

My
name is
Jon
Hickey
and I
recently
joined
the
Vice
President's
Domestic Policy
team.
Part of
my
portfolio
is
Environment. I
look
forward
to
working
with
you and
your
team!

The
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Xtendi
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Vapor
Grip
Technol
ogy
Label.
Would
you
have
time to
discuss
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some
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today?

Also, if
there is
a time
when
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(and/or
whoeve
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feel
approp

riate
from
your
team)
would
have
time to
meet
perhap
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week
just to
make
face-to-
face
introdu
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and
perhap
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an
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Pesticid
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Progra
m?

Thanks!

Best
regards
,

Jon

Jon
Hickey

Office
of the
Vice
Preside
nt

Special
Advisor
for
Domestic
Policy

Ex. 6 PP – EOP

Message

From: Beck, Nancy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=168ECB5184AC44DE95A913297F353745-BECK, NANCY]
Sent: 7/23/2018 8:19:42 PM
To: Baptist, Erik [Baptist.Erik@epa.gov]
Subject: Re: LINDA/OPP: Arkansas Democrat-Gazette - Dicamba

Lol.

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
P: 202-564-1273
M: 202-731-9910
beck.nancy@epa.gov

On Jul 23, 2018, at 3:08 PM, Baptist, Erik <Baptist.Erik@epa.gov> wrote:

When do we plan to visit Arkansas? Is that public knowledge yet?

Erik Baptist
Senior Deputy General Counsel
Office of General Counsel
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460
(202) 564-1689
baptist.erik@epa.gov

From: Strauss, Linda
Sent: Monday, July 23, 2018 3:58 PM
To: Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>
Cc: Sisco, Debby <Sisco.Debby@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>
Subject: FW: LINDA/OPP: Arkansas Democrat-Gazette - Dicamba

Reporter wants answer this one asap/today; others answers can come later. Thanks, Kaitlin.

Incoming: Can you confirm this? EPA is planning an "imminent" (his words) visit to Arkansas to discuss dicamba formulation re-registration.

Response: Correct.

From: Daguillard, Robert
Sent: Monday, July 23, 2018 3:43 PM
To: Strauss, Linda <Strauss.Linda@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Sisco, Debby <Sisco.Debby@epa.gov>; Dinkins, Darlene

<Dinkins.Darlene@epa.gov>

Cc: Lantz, Tracy <Lantz.Tracy@epa.gov>; Naimy, Nina <Naimy.Nina@epa.gov>

Subject: RE: LINDA/OPP: Arkansas Democrat-Gazette - Dicamba - Awaiting DDL info

So, I spoke to the reporter not long ago. He hasn't written about dicamba yet this year, so he's looking for an overall update and report on 2018 regulatory steps, incident reports, etc.

Again, he's on no firm deadline, but he'll write stories based on what information he's about to confirm.

His top priority is confirming a report that EPA is planning an "imminent" (his words) visit to Arkansas to discuss dicamba formulation re-registration. I don't know what we can tell him at this stage. He understands EPA doesn't normally comment on ongoing investigations.

He also understands a lot of crop damage information comes from the states. However, he'd be grateful for anything we could tell him about re-registration decision timing, incident report numbers, impact of dicamba drift on crops, vegetable gardens, etc.

I'll also let R6 know I talked to the reporter.

Let me know if you need any more information about the reporter's focus and interests.

Cheers, R.

Robert Daguillard
Office of Media Relations
U.S. Environmental Protection Agency
Washington, DC
+1 (202) 564-6618 (O)
+1 (202) 360-0476 (M)

From: Strauss, Linda

Sent: Monday, July 23, 2018 11:58 AM

To: Daguillard, Robert <Daguillard.Robert@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Sisco, Debby <Sisco.Debby@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>

Cc: Lantz, Tracy <Lantz.Tracy@epa.gov>; Naimy, Nina <Naimy.Nina@epa.gov>

Subject: RE: LINDA/OPP: Arkansas Democrat-Gazette - Dicamba - Awaiting DDL info

Thanks.

From: Daguillard, Robert

Sent: Monday, July 23, 2018 11:31 AM

To: Strauss, Linda <Strauss.Linda@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Sisco, Debby <Sisco.Debby@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>

Cc: Lantz, Tracy <Lantz.Tracy@epa.gov>; Naimy, Nina <Naimy.Nina@epa.gov>

Subject: RE: LINDA/OPP: Arkansas Democrat-Gazette - Dicamba - Awaiting DDL info

This is what the reporter sent me.

I have no specific story in mind yet, but it's something that I'll tackle in the next few days.
It's time to make another road trip into dicamba country of Arkansas.
I am free for a call anytime, Robert.

Cheers, R.

Robert Daguillard
Office of Media Relations
U.S. Environmental Protection Agency
Washington, DC
+1 (202) 564-6618 (O)
+1 (202) 360-0476 (M)

From: Strauss, Linda
Sent: Monday, July 23, 2018 11:23 AM
To: Han, Kaythi <Han.Kaythi@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Sisco, Debby <Sisco.Debby@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>; Daguillard, Robert <Daguillard.Robert@epa.gov>
Cc: Lantz, Tracy <Lantz.Tracy@epa.gov>; Naimy, Nina <Naimy.Nina@epa.gov>
Subject: RE: LINDA/OPP: Arkansas Democrat-Gazette - Dicamba - Awaiting DDL info

Hi Robert, any word on deadline for this? Longer always better ☺ Thanks.

From: Daguillard, Robert
Sent: Friday, July 20, 2018 2:15 PM
To: Strauss, Linda <Strauss.Linda@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>; Sisco, Debby <Sisco.Debby@epa.gov>; Han, Kaythi <Han.Kaythi@epa.gov>; Dinkins, Darlene <Dinkins.Darlene@epa.gov>
Cc: Carey, Curtis <Carey.Curtis@epa.gov>; Bryan, David <Bryan.David@epa.gov>; Taheri, Diane <Taheri.Diane@epa.gov>; Gray, David <gray.david@epa.gov>; Kelley, Jeff <kelley.jeff@epa.gov>; Rowan, Anne <rowan.anne@epa.gov>
Subject: LINDA/OPP: Arkansas Democrat-Gazette - Dicamba - Awaiting DDL info

ARKANSAS DEMOCRAT-GAZETTE
STEPHEN STEED
AWAITING DDL INFO

All, sending the following inquiry now, although I'm waiting to hear the reporter's deadline, and to get a better sense of the focus of his inquiry. Let me know if there are any questions I should ask him.

+ Regions 5, 6, 7, for awareness.

+++++

Good morning, Robert and Tricia

We've corresponded a few times over the last nine months or so regarding dicamba.

Does the EPA have an estimate when it will release its decision on re-registering dicamba (Xtendimax, etc.) for in-crop use? (I hear August is the timeline.) What is the EPA doing as it makes that decision? (Are EPA representatives visiting farmers, regulators, etc. in states currently reporting dicamba damage and fielding complaints?) Is the EPA considering damage to non-ag interests (backyard gardens, decorative trees and shrubs) as it considers re-registration? Is the EPA demanding improvements by dicamba manufacturers to its formulations? Under FIFRA, which requires manufacturers to report to the EPA any “adverse” incidents regarding their products, how many such reports were filed with the EPA by Monsanto, Dow and BASF regarding dicamba’s use last season? (The last time I asked about this, you cited a “fluid” situation and declined specifics. I presume last year’s problems aren’t so fluid now.)

Arkansas banned dicamba for in-crop use after April 16 yet has received more than 150 complaints of alleged dicamba damage. Soybean damage has been estimated at 400,000 acres in Arkansas — and 500,000 acres in Illinois, and 100,000 acres in Missouri, two states that allowed in-crop use. What does that tell the EPA about dicamba’s future for in-crop use?

Thanks much.

Stephen Steed
Arkansas Democrat-Gazette
501-399-3654

Cheers, R.

Robert Daguiard
Office of Media Relations
U.S. Environmental Protection Agency
Washington, DC
+1 (202) 564-6618 (O)
+1 (202) 360-0476 (M)

Message

From: Beck, Nancy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=168ECB5184AC44DE95A913297F353745-BECK, NANCY]
Sent: 11/1/2018 11:57:48 PM
To: Bennett, Tate [Bennett.Tate@epa.gov]
CC: Baptist, Erik [Baptist.Erik@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Abboud, Michael [abboud.michael@epa.gov]; Strauss, Linda [Strauss.Linda@epa.gov]
Subject: Re: Dicamba Coverage

Thanks!

Nancy B. Beck, Ph.D., DABT

Deputy Assistant Administrator

Office of Chemical Safety and Pollution Prevention

P: [202-564-1273](tel:202-564-1273)

beck.nancy@epa.gov

On Nov 1, 2018, at 7:41 PM, Bennett, Tate <Bennett.Tate@epa.gov> wrote:

Abboud is amazing. Thanks for aggregating.

Begin forwarded message:

From: "Abboud, Michael" <abboud.michael@epa.gov>
Date: November 1, 2018 at 4:34:17 PM EDT
To: "Bennett, Tate" <Bennett.Tate@epa.gov>, "Beach, Christopher" <beach.christopher@epa.gov>, "Block, Molly" <block.molly@epa.gov>, "Hewitt, James" <hewitt.james@epa.gov>, "Konkus, John" <konkus.john@epa.gov>
Subject: Dicamba Coverage

[The Wall Street Journal: EPA Allows Farmers to Keep Using Bayer's Controversial Weedkiller](#)

The Environmental Protection Agency will continue to allow farmers to spray crops with a controversial weedkiller, while tightening restrictions, the agency said. The EPA extended by two years its approval of XtendiMax, a version of the herbicide dicamba made by Bayer BAYRY +4.04% AG, which some farmers and researchers have blamed for damaging millions of acres of crops over the past two years. The decision is a win for Bayer, which also markets soybean and cotton seeds genetically engineered to survive the chemical. Bayer this year acquired U.S. seed and pesticide giant Monsanto, which in 2018 sold about 50 million acres' worth of dicamba-tolerant soybean and cotton seeds to farmers while training them how to spray the herbicide and avoid damaging other

crops. "EPA understands that dicamba is a valuable pest control tool for America's farmers," said acting EPA administrator Andrew Wheeler.

Reuters: EPA Adds Restrictions To Use Of Bayer, BASF Weed Killer Linked To Crop Damage

The U.S. Environmental Protection Agency said on Wednesday it would allow farmers to spray a controversial weed killer made by Bayer AG's Monsanto Co and BASF SE for two more years, with additional restrictions on use. The agency said the herbicide, called dicamba, is an important tool for controlling weeds in crop fields. However, the EPA said it would prohibit applications on soybeans 45 days after planting and on cotton 60 days after planting to address "potential concerns to surrounding crops and plants." The agency also limited the times during which dicamba can be sprayed.

AgWeb: Dicamba Registration Extended To 2020, Additional Restrictions Apply

Wednesday the Environmental Protection Agency (EPA) announced it would extend over-the-top use of dicamba in cotton and soybeans until Dec. 20, 2020. The agency said it considered several different sources of input before making this decision. "EPA understands that dicamba is a valuable pest control tool for America's farmers," said EPA Acting Administrator Andrew Wheeler in a press release. "By extending the registration for another two years with important new label updates that place additional restrictions on the product, we are providing certainty to all stakeholders for the upcoming growing season."

Successful Farming: EPA Announces Changes To Dicamba Registration

On October 31, the U.S. Environmental Protection Agency (EPA) announced that it is extending the registration of dicamba for two years for "over-the-top" use (application to growing plants) to control weeds in fields for cotton and soybean plants genetically engineered to resist dicamba. This action was informed by input from and extensive collaboration between EPA, state regulators, farmers, academic researchers, pesticide manufacturers, and other stakeholders, according to an EPA news release. "EPA understands that dicamba is a valuable pest control tool for America's farmers," said EPA Acting Administrator Andrew Wheeler in an EPA news release. "By extending the registration for another two years with important new label updates that place additional restrictions on the product, we are providing certainty to all stakeholders for the upcoming growing season."

The Progressive Farmer: EPA Rules On Dicamba

The U.S. Environmental Protection agency has announced it has extended the registration for dicamba herbicides for over-the-top use in Roundup Ready Xtend crops for an additional two years. At the same time, the agency also handed down more label requirements for using XtendiMax, FeXapan and Engenia herbicides in dicamba-tolerant cotton and soybeans. In a news release, EPA stated that the action considered input and collaboration between EPA state regulators, farmers, academic researchers, pesticide manufacturers and other stakeholders. "EPA understands that dicamba is a valuable pest control tool for America's farmers," said EPA Acting Administrator Andrew Wheeler. "By extending the registration for another two years with important new label updates that place additional restrictions on the product, we are providing certainty to all stakeholders for the upcoming growing season."

Agri-Pulse: EPA Extends Dicamba Registration For Two Years

Declaring that dicamba "is a valuable pest control tool for America's farmers," EPA Acting Administrator Andrew Wheeler announced today the agency was extending by two years the conditional registration for the herbicide to be used "over the top" to

control weeds in dicamba-resistant soybeans and cotton. The agency, which added additional restrictions to the use of the three registered dicamba products, said in a news release the decision "was informed by input from and extensive collaboration between EPA, state regulators, farmers, academic researchers, pesticide manufacturers, and other stakeholders." Bayer, the manufacturer of both Xtendimax and the seeds that go with it, said the decision "ensures that growers will have access to this vital weed-control tool for the 2019 season and beyond."

The Wall Street Journal

<https://www.wsj.com/articles/epa-allows-farmers-to-keep-using-bayers-controversial-weedkiller-1541040054>

EPA Allows Farmers to Keep Using Bayer's Controversial Weedkiller

By Jacob Bunge, 10/31/18

The Environmental Protection Agency will continue to allow farmers to spray crops with a controversial weedkiller, while tightening restrictions, the agency said.

The EPA extended by two years its approval of XtendiMax, a version of the herbicide dicamba made by Bayer BAYRY +4.04% AG, which some farmers and researchers have blamed for damaging millions of acres of crops over the past two years.

The decision is a win for Bayer, which also markets soybean and cotton seeds genetically engineered to survive the chemical. Bayer this year acquired U.S. seed and pesticide giant Monsanto, which in 2018 sold about 50 million acres' worth of dicamba-tolerant soybean and cotton seeds to farmers while training them how to spray the herbicide and avoid damaging other crops.

"EPA understands that dicamba is a valuable pest control tool for America's farmers," said acting EPA administrator Andrew Wheeler.

For Bayer, the EPA's approval will preserve an estimated \$159 million in profits from dicamba in 2019, according to Bernstein analysts. The EPA will require new buffer zones and limit the hours farmers are allowed to apply the spray, in an effort to prevent it from drifting.

Monsanto began marketing XtendiMax after initial EPA approval in late 2016. The company pitched it as a way to stop weeds resistant to glyphosate, the herbicide Monsanto markets as Roundup. Dicamba, the main ingredient in XtendiMax, historically has been prone to drifting.

Monsanto said its new version of dicamba was far less prone to drift. But some farmers and weed scientists blamed dicamba for hundreds of damaged fields. Monsanto officials attributed the vast majority of harmed fields to farmers spraying on windy days and other errors.

University of Missouri researchers in July estimated 1.1 million acres of soybeans were affected this year, including 500,000 acres in Illinois, the top soybean-producing state.

Reuters

<https://www.reuters.com/article/us-usa-pesticides-dicamba/epa-allows-u-s-farmers-to-keep-using-weed-killer-linked-to-crop-damage-idUSKCN1N534A>

EPA Adds Restrictions To Use Of Bayer, BASF Weed Killer Linked To Crop Damage

By Tom Polansek, 10/31/18

The U.S. Environmental Protection Agency said on Wednesday it would allow farmers to spray a controversial weed killer made by Bayer AG's Monsanto Co and BASF SE for two more years, with additional restrictions on use.

The agency said the herbicide, called dicamba, is an important tool for controlling weeds in crop fields.

However, the EPA said it would prohibit applications on soybeans 45 days after planting and on cotton 60 days after planting to address "potential concerns to surrounding crops and plants." The agency also limited the times during which dicamba can be sprayed.

The approval comes after two years of complaints by some farmers who said the weed killer drifted away from where it was sprayed on soy and cotton crops that Monsanto engineered to resist it.

According to farmers and agronomists, the chemical then damaged millions of acres of nearby crops and plants that could not tolerate it, including fruit trees and flowers. In the summer of 2017, this damaged an estimated 4 percent of U.S. soybean plantings.

Bayer and BASF say dicamba is safe when used properly and have attributed crop damage to user error. BASF did not immediately respond to a request for comment, while Bayer said it is planning to train farmers on the EPA's new restrictions.

"This continued registration, based on an extensive review, keeps this much-needed weed control tool in the hands of growers," said Ryan Rubischko, who heads Bayer's dicamba portfolio.

Farmers have been anxiously awaiting the EPA's ruling amid uncertainty about whether to order dicamba-resistant crop seeds to plant next year. Some weed experts and independent seed companies had called for the agency to pull the herbicide off the market, or only allow it to be used to clear weeds before crops are planted.

"By extending the registration for another two years with important new label updates that place additional restrictions on the product, we are providing certainty to all stakeholders for the upcoming growing season," EPA Acting Administrator Andrew Wheeler said.

Bayer bought Monsanto and its portfolio of dicamba-resistant soy seeds for \$63 billion this year in a deal that created the world's largest seed and pesticides maker. The company sells dicamba herbicide, along with BASF and DowDuPont Inc.

Bayer is banking on its dicamba-resistant soybean seeds to dominate U.S. soy production. They are seen as a replacement for Monsanto's Roundup Ready line of seeds, engineered to tolerate the weed killer glyphosate, which has lost effectiveness as weeds develop tolerance to the chemical.

AgWeb

<https://www.agweb.com/article/dicamba-registration-extended-to-2020-additional-restrictions-apply/>

Dicamba Registration Extended To 2020, Additional Restrictions Apply

By Sonja Begemann, 10/31/18

Wednesday the Environmental Protection Agency (EPA) announced it would extend over-the-top use of dicamba in cotton and soybeans until Dec. 20, 2020. The agency said it considered several different sources of input before making this decision.

“EPA understands that dicamba is a valuable pest control tool for America’s farmers,” said EPA Acting Administrator Andrew Wheeler in a press release. “By extending the registration for another two years with important new label updates that place additional restrictions on the product, we are providing certainty to all stakeholders for the upcoming growing season.”

Changes to the label include the following:

- Two-year registration (until December 20, 2020)
- Only certified applicators may apply dicamba over the top (those working under the supervision of a certified applicator may no longer make applications)
- Prohibits over-the-top application of dicamba on soybeans 45 days after planting and cotton 60 days after planting
- For cotton, limits the number of over-the-top applications from 4 to 2 (soybeans remain at 2 OTT applications)
- Applications will be allowed only from 1 hour after sunrise to 2 hours before sunset
- In counties where endangered species may exist, the downwind buffer will remain at 110 feet and there will be a new 57-foot buffer around the other sides of the field (the 110-foot downwind buffer applies to all applications, not just in counties where endangered species may exist)
- Clarifies training period for 2019 and beyond, ensuring consistency across all three products
- Enhanced tank clean out instructions for the entire system
- Enhanced label to improve applicator awareness on the impact of low pH’s on the potential volatility of dicamba
- Label clean up and consistency to improve compliance and enforceability

Successful Farming

<https://www.agriculture.com/news/crops/epa-extends-dicamba-registration-two-years>

EPA Announces Changes To Dicamba Registration

By Successful Farming Staff, 10/31/18

On October 31, the U.S. Environmental Protection Agency (EPA) announced that it is extending the registration of dicamba for two years for “over-the-top” use (application to growing plants) to control weeds in fields for cotton and soybean plants genetically engineered to resist dicamba.

This action was informed by input from and extensive collaboration between EPA, state regulators, farmers, academic researchers, pesticide manufacturers, and other stakeholders, according to an EPA news release.

“EPA understands that dicamba is a valuable pest control tool for America’s farmers,” said EPA Acting Administrator Andrew Wheeler in an EPA news release. “By extending the registration for another two years with important new label updates that place additional restrictions on the product, we are providing certainty to all stakeholders for the upcoming growing season.”

Wheeler said the following label changes were made to ensure that these products can continue to be used effectively while addressing potential concerns to surrounding crops and plants:

DICAMBA REGISTRATION DECISIONS FOR 2019-2020 GROWING SEASON

- Two-year registration (until December 20, 2020)
- Only certified applicators may apply dicamba over the top (those working under the supervision of a certified applicator may no longer make applications)
- Prohibit over-the-top (OTT) application of dicamba on soybeans 45 days after planting and cotton 60 days after planting
- For cotton, limit the number of over-the-top applications from 4 to 2 (soybeans remain at 2 OTT applications)
- Applications will be allowed only from 1 hour after sunrise to 2 hours before sunset
- In counties where endangered species may exist, the downwind buffer will remain at 110 feet and there will be a new 57-foot buffer around the other sides of the field (the 110-foot downwind buffer applies to all applications, not just in counties where endangered species may exist)
- Clarify training period for 2019 and beyond, ensuring consistency across all three products
- Enhanced tank clean out instructions for the entire system
- Enhanced label to improve applicator awareness on the impact of low pH’s on the potential volatility of dicamba
- Label clean up and consistency to improve compliance and enforceability

The registration for all dicamba products will automatically expire on December 20, 2020, unless EPA further extends it.

EPA has reviewed substantial amounts of new information and concluded that the continued registration of these dicamba products meets FIFRA’s registration standards. The Agency has also determined that extending these registrations with the new safety measures will not affect endangered species.

OVER-THE-TOP APPLICATION SPECIFICS

Several states placed date application restrictions in 2018. Minnesota, for example, prohibited over-the-top applications on soybeans after June 20. Per the new federal rules, soybeans planted on May 1 in states with no state date restrictions would fall within a June 20 application deadline, due to the 45-day window. However, soybeans planted on May 20 could have dicamba applied to it until July 4.

“The data was clear in 2017 that (off-target) incidents increase after June 20 and especially in July,” says Jeff Gunsolus, University of Minnesota Extension weeds specialist.

Compared with states that did not have cutoff dates, Minnesota had limited complaints of off-site dicamba movement in 2018, says Gunsolus. In 2017, there were over 250 reports of dicamba damage, he says. As of late September 2018, MDA has so far fielded 52 reports of dicamba damage covering 1,850 acres, says Joshua Stamper, director of the pesticide and fertilizer management division for the MDA. Of those acres, most were soybeans but not all, he says.

Gunsolus says applicator training did help reduce off-target movement of dicamba in many states. However, states with no additional state restrictions like Illinois had problems with off-target dicamba movement in 2018.

As of late September, the Illinois Department of Agriculture had recorded 330 dicamba complaints in 2018. That’s up from 246 in 2017. With no temperature and/or date cutoffs, complaints continued to come in through July and August, says Jean Payne, president of the Illinois Fertilizer and Chemical Association.

“Nearly all are soybean related,” she says.

TIME OF DAY APPLICATIONS

The new federal label allows dicamba applications only from 1 hour after sunrise to 2 hours before sunset. In summer, this allows applications into the evening in the longest days of summer, when sunsets between 9 p.m. and 10 p.m. occur. University of Missouri (MU) researchers have found temperature inversions setting up at 5 p.m. or 6 p.m., a time when many applicators would still be spraying in June under the federal guidelines if no state restrictions applied.

“If you read almost all pesticide labels, there is a line that says don’t apply during temperature inversions,” says Mandy Bish, MU senior research specialist.

Temperature inversions can key off-target movement.

Although not foolproof, smoke bombs are one way to detect temperature inversions. Smoke bombs set off at 4 p.m. by MU scientists showed fairly rapid dispersal. Ones set off at 7:30 p.m. lingered around 50 seconds, which indicated inversion presence, she says.

The Progressive Farmer

<https://www.dtnpf.com/agriculture/web/ag/news/crops/article/2018/11/01/new-epa-rules-dicamba-use-revealed-2>

EPA Rules on Dicamba

By Pam Smith, 10/31/18

The U.S. Environmental Protection agency has announced it has extended the registration for dicamba herbicides for over-the-top use in Roundup Ready Xtend crops for an additional two years.

At the same time, the agency also handed down more label requirements for using XtendiMax, FeXapan and Engenia herbicides in dicamba-tolerant cotton and soybeans.

In a news release, EPA stated that the action considered input and collaboration between EPA state regulators, farmers, academic researchers, pesticide manufacturers and other stakeholders.

"EPA understands that dicamba is a valuable pest control tool for America's farmers," said EPA Acting Administrator Andrew Wheeler. "By extending the registration for another two years with important new label updates that place additional restrictions on the product, we are providing certainty to all stakeholders for the upcoming growing season."

Those new dicamba registration decisions for 2019-2020 include:

- Only certified applicators may apply dicamba over the top (those working under the supervision of a certified applicator may no longer make applications).
- Prohibit over-the-top application of dicamba on soybeans 45 days after planting and cotton 60 days after planting.
- For cotton, limit the number of over-the-top applications from four applications to two applications (soybeans remain at two over-the-top applications).

Agri-Pulse

<https://www.agri-pulse.com/articles/11614-epa-extends-dicamba-registration-for-two-years>

EPA extends dicamba registration for two years

By Steve Davies, 10/31/18

Declaring that dicamba "is a valuable pest control tool for America's farmers," EPA Acting Administrator Andrew Wheeler announced today the agency was extending by two years the conditional registration for the herbicide to be used "over the top" to control weeds in dicamba-resistant soybeans and cotton.

The agency, which added additional restrictions to the use of the three registered dicamba products, said in a news release the decision "was informed by input from and extensive collaboration between EPA, state regulators, farmers, academic researchers, pesticide manufacturers, and other stakeholders."

Bayer, the manufacturer of both Xtendimax and the seeds that go with it, said the decision "ensures that growers will have access to this vital weed-control tool for the 2019 season and beyond."

"XtendiMax is a highly effective, proven broadleaf weed control option that is delivering results for farmers, who have reported 95 percent weed control satisfaction over the last two seasons," said Ryan Rubischko, Bayer's dicamba portfolio lead.

The Center for Biological Diversity, however, harshly criticized the agency for continuing to allow the use of the herbicide with "minor new restrictions," despite having "damaged an estimated 5 million acres of crops, trees and backyard gardens over the past two years." CBD is among groups suing EPA for its initial decision to register dicamba two years ago.

EPA said it was extending the registration for "all dicamba products" until Dec. 20, 2020 -- Xtendimax, Corteva Agriscience's FeXaPan, and BASF's Engenia, the registration for

which was due to expire Dec. 20. Both Xtendimax and FeXaPan's registrations were due to expire Nov. 9.

EPA did not release the new label, but said in its release it "was making the following label changes" for the 2019-2020 growing seasons:

- Only certified applicators may apply dicamba over the top (those working under the supervision of a certified applicator may no longer make applications);
- Over-the-top application of dicamba on soybeans 45 days after planting and cotton 60 days after planting is prohibited;
- For cotton, over-the-top (OTT) applications are cut from four to two (soybeans remain at 2 OTT applications);
- Applications will be allowed only from one hour after sunrise to two hours before sunset;
- In counties where endangered species may exist, the downwind buffer will remain at 110 feet and there will be a new 57-foot buffer around the other sides of the field (the 110-foot downwind buffer applies to all applications, not just in counties where endangered species may exist).

EPA also said it was clarifying the training period for 2019 and beyond, to ensure "consistency across all three products and said there would be "enhanced tank clean-out instructions for the entire system" as well as an "enhanced label to improve applicator awareness on the impact of low pH's on the potential volatility of dicamba."

Message

From: Chism, William [Chism.Bill@epa.gov]
Sent: 10/23/2018 5:05:42 PM
To: Becker, Jonathan [Becker.Jonathan@epa.gov]
Subject: Dicamba Xtendimax 2017 buffer was for Sensitive Sites
Attachments: PRIA letter Dicamba on dicamba-resistant cotton soybeans000524-00617-20161109.pdf

Page 20 it says

PROTECTION OF SENSITIVE AREAS

Maintain a 110 foot downwind buffer (when applying 22 fluid ounces of this product per acre) or a 220 foot downwind buffer (when applying 44 fluid ounces of this product per acre) between the last treated row and the closest downwind edge (in the direction in which the wind is blowing). If any of the following areas below are directly adjacent to the treated field, the areas listed below can be considered part of the buffer distance.

Message

From: Hawkins, Caleb [Hawkins.Caleb@epa.gov]
Sent: 9/7/2018 8:35:33 PM
To: Becker, Jonathan [Becker.Jonathan@epa.gov]
Subject: FW: USDA Yield Data--2016 vs 2017
Attachments: 2017 Soybean and Cotton Yields_ Nationwide and in Particular States_102619489_1_US-DOCS (003).pdf; ATT00001.htm

Caleb Hawkins
OCSPP/OPP/BEAD/BAB
hawkins.caleb@epa.gov
703.308.8104
S9313

**ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED
DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED**

From: Baris, Reuben
Sent: Thursday, July 26, 2018 3:39 PM
To: Chism, William <Chism.Bill@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>; Kaul, Monisha <Kaul.Monisha@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>
Subject: Fwd: USDA Yield Data--2016 vs 2017

I can't see it this too well on my phone. Can you all take a look at this and compare with the press release from USDA (referenced by Rick)?

Sent from my iPhone

Begin forwarded message:

From: "MARVIN, THOMAS [AG/1920]" <thomas.marvin@monsanto.com>
Date: July 26, 2018 at 2:34:10 PM CDT
To: "Keigwin, Richard" <Keigwin.Richard@epa.gov>, "Goodis, Michael" <Goodis.Michael@epa.gov>, "Kenny.Dan@epamail.epa.gov" <Kenny.Dan@epamail.epa.gov>, "Baris, Reuben" <Baris.Reuben@epa.gov>
Subject: USDA Yield Data--2016 vs 2017

All-

Please find attached a courtesy copy of a report we submitted today through the e-portal to provide additional support for the registration of M1768 Herbicide (Xtendimax® with VaporGrip® Technology), EPA Reg. 524-617. The report analyzes USDA production and yield data from 2017 and 2016.

Tom

Tom Marvin
Director, Federal Regulatory Affairs
1300 I Street, NW
Washington, DC 20005
Cell: 202-676-7846

Desk: 202-383-2851

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Message

From: Chism, William [Chism.Bill@epa.gov]
Sent: 9/7/2018 1:23:31 PM
To: Tindall, Kelly [tindall.kelly@epa.gov]; Hawkins, Caleb [Hawkins.Caleb@epa.gov]; Becker, Jonathan [Becker.Jonathan@epa.gov]
Subject: RE: Dicamba registration - could you word smith this?

Hi Kelly

Thanks. At least we can point to the PRIA letter for our choice of words.

Bill

Bill Chism
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(703) 308-8136
chism.bill@epa.gov

From: Tindall, Kelly
Sent: Friday, September 07, 2018 9:19 AM
To: Chism, William <Chism.Bill@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>; Becker, Jonathan <Becker.Jonathan@epa.gov>
Subject: RE: Dicamba registration - could you word smith this?

I guess instead, it should be DR – I will make that change

Kelly Tindall, Biologist
Biological Analysis Branch
Biological and Economic Analysis Division
Office of Pesticide Programs
US Environmental Protection Agency
703-308-8188

**ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED
DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED**

From: Chism, William
Sent: Friday, September 07, 2018 9:17 AM
To: Hawkins, Caleb <Hawkins.Caleb@epa.gov>; Tindall, Kelly <tindall.kelly@epa.gov>; Becker, Jonathan <Becker.Jonathan@epa.gov>
Subject: FW: Dicamba registration - could you word smith this?

FYI. Sarah sent me a link to the PRIA letter. The original PRIA letter called it dicamba-resistant cotton and soybeans.

PRIA Label Amendment – Adding new uses on dicamba-resistant cotton and soybeans

Here is the link to the registration letter if you want to describe any of the other conditions:

https://www3.epa.gov/pesticides/chem_search/ppls/000524-00617-20161109.pdf

Bill Chism
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(703) 308-8136
chism.bill@epa.gov

From: Meadows, Sarah
Sent: Friday, September 07, 2018 9:02 AM
To: Chism, William <Chism.Bill@epa.gov>
Subject: RE: Dicamba registration - could you word smith this?

Hi, Bill. This looks fine. The product was actually registered in 2014, but the new brand name of Xtendimax and the new uses were registered in 2016. The way you have it worded covers that.

Here is the link to the registration letter if you want to describe any of the other conditions:
https://www3.epa.gov/pesticides/chem_search/ppls/000524-00617-20161109.pdf

Sarah

From: Chism, William
Sent: Friday, September 07, 2018 8:39 AM
To: Meadows, Sarah <Meadows.Sarah@epa.gov>
Subject: Dicamba registration - could you word smith this?

Hi Sarah

To explain why we are conducting another benefits assessment we would like to describe the registration. Could you fix this text?

In 2016 the EPA registered a dicamba formulation, Xtendimax™ with VaporGrip™ Technology to control weeds in cotton and soybean plants that have been genetically engineered (GE) to resist dicamba. The registration is time-limited and will automatically expire after two years on November 9, 2018.

Thanks. Bill

Bill Chism
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(703) 308-8136
chism.bill@epa.gov

Message

From: Bennett, Tate [Bennett.Tate@epa.gov]
Sent: 9/26/2018 12:49:21 AM
To: Goodis, Michael [Goodis.Michael@epa.gov]
CC: Becker, Jonathan [Becker.Jonathan@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]; Keigwin, Richard [Keigwin.Richard@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]; Keller, Kaitlin [keller.kaitlin@epa.gov]
Subject: Re: Dicamba Label Language for Buffers

Thank you, Mike. Have a nice evening.

On Sep 25, 2018, at 5:11 PM, Goodis, Michael <Goodis.Michael@epa.gov> wrote:

Hi Tate,

As requested during the meeting today, below are sections of the dicamba labels that pertain to buffer calculation and what features can be included. Let me know if you have any questions.

Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

From: Baris, Reuben
Sent: Tuesday, September 25, 2018 4:38 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Label language for buffer "exclusions"

The following are the relevant sections for buffer calculations (and what can be included in that calculation) for the engenia and xtendimax labels (Fexapan is the same as xtendimax).

Labels are also attached for reference (Pg. 19 xtendimax:

https://www3.epa.gov/pesticides/chem_search/ppls/000524-00617-20171012.pdf & pg 11 engenia:
https://www3.epa.gov/pesticides/chem_search/ppls/007969-00345-20171012.pdf)

<image001.png>

Xtendimax

<image002.png>

REUBEN BARIS | PRODUCT MANAGER, TEAM 25 | HERBICIDE BRANCH
U.S. ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF PESTICIDE PROGRAMS | (703) 305-7356

Message

From: Goodis, Michael [Goodis.Michael@epa.gov]
Sent: 9/25/2018 9:11:14 PM
To: Bennett, Tate [Bennett.Tate@epa.gov]; Becker, Jonathan [Becker.Jonathan@epa.gov]; Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]; Baptist, Erik [Baptist.Erik@epa.gov]
CC: Keigwin, Richard [Keigwin.Richard@epa.gov]; Messina, Edward [Messina.Edward@epa.gov]; Keller, Kaitlin [keller.kaitlin@epa.gov]
Subject: Dicamba Label Language for Buffers

Hi Tate,

As requested during the meeting today, below are sections of the dicamba labels that pertain to buffer calculation and what features can be included. Let me know if you have any questions.

Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

From: Baris, Reuben
Sent: Tuesday, September 25, 2018 4:38 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Label language for buffer "exclusions"

The following are the relevant sections for buffer calculations (and what can be included in that calculation) for the engenia and xtendimax labels (Fexapan is the same as xtendimax).

Labels are also attached for reference (Pg. 19 xtendimax: https://www3.epa.gov/pesticides/chem_search/ppls/000524-00617-20171012.pdf & pg 11 engenia: https://www3.epa.gov/pesticides/chem_search/ppls/007969-00345-20171012.pdf)

Sensitive Areas

Engenia should only be applied when the potential for drift to adjacent sensitive areas (e.g. residential areas, bodies of water, known habitat for threatened or endangered species, or sensitive crop plants) is minimal (e.g. when the wind is blowing away from sensitive areas).

Maintain a 110 foot buffer when applying this product from the downwind outer edges of the field, less the distance of any of the adjacent areas specified below.

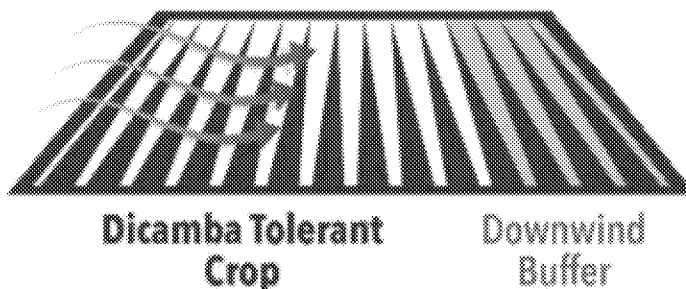
To maintain the required buffer zone:

- No application swath containing **Engenia** can be initiated in, or into an area that is within the applicable buffer distance.
- The following areas may be included in the buffer distance calculation when adjacent to field edges:
 1. Roads, paved or gravel surfaces.
 2. Agricultural fields that have been prepared for planting.
 3. Planted agricultural fields containing asparagus, corn, DT cotton, DT soybeans, sorghum, proso millet, small grains and sugarcane.
 4. Areas covered by the footprint of a building, shade house, silo, feed crib, or other man made structure with walls and or roof.

Xtendimax

9.1.4.a. Buffer Requirement

The applicator **must always maintain** a 110 foot downwind buffer (when applying up to 22 fluid ounces of this product per acre) or a 220 foot downwind buffer (when applying greater than 22 up to 44 fluid ounces of this product per acre) between the last treated row and the nearest downwind field edge (in the direction the wind is blowing).



The following areas may be included in the buffer distance calculation when directly adjacent to the treated field edges:

- Roads, paved or gravel surfaces.
- Planted agricultural fields containing: corn, dicamba tolerant cotton, dicamba tolerant soybean, sorghum, proso millet, small grains and sugarcane. If the applicator intends to include such crops as dicamba tolerant cotton and/or dicamba tolerant soybeans in the buffer distance calculation, the applicator must confirm the crops are in fact dicamba tolerant.
- Agricultural fields that have been prepared for planting.
- Areas covered by the footprint of a building, silo, or other man made structure with walls and or roof.

Message

From: Chism, William [Chism.Bill@epa.gov]
Sent: 8/27/2018 3:22:12 PM
To: Becker, Jonathan [Becker.Jonathan@epa.gov]; Hawkins, Caleb [Hawkins.Caleb@epa.gov]
Subject: RE: 9th Circuit Court - Wednesday

Second paragraph from the end

Sanford C. Bernstein & Co. analyst Jonas Oxgaard said in an August research note.
The likeliest outcome this year is for a one-year temporary registration.

<https://www.insurancejournal.com/news/national/2018/08/21/498644.htm>

Bill Chism, Ph.D.
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(703) 308-8136
chism.bill@epa.gov

From: Chism, William
Sent: Monday, August 27, 2018 11:12 AM
To: Jonathan Becker <Becker.Jonathan@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>
Subject: 9th Circuit Court - Wednesday

Case to Watch: 9th Circuit hears arguments in Monsanto dicamba suit against EPA

A federal appeals court on Wednesday will hear oral arguments in a lawsuit brought by environmental groups who have asked the court to review the U.S. Environmental Protection Agency's 2016 approval of Monsanto's dicamba-based XtendiMax weed killer.

The groups allege the EPA's decision to allow the sale of the herbicide violates the Federal Insecticide, Fungicide, and Rodenticide Act because the agency failed to perform the required analysis of the risk posed to nearby crops and wildlife of dicamba drift.

Message

From: Kaul, Monisha [Kaul.Monisha@epa.gov]
Sent: 8/13/2018 2:54:08 PM
To: Becker, Jonathan [Becker.Jonathan@epa.gov]; Hawkins, Caleb [Hawkins.Caleb@epa.gov]; Chism, William [Chism.Bill@epa.gov]
CC: Tindall, Kelly [tindall.kelly@epa.gov]; Jones, Arnet [Jones.Arnet@epa.gov]
Subject: FW: Dicamba report comparisons
Attachments: Dicamba complaints and proactive measures.xlsx

From: Keller, Kaitlin
Sent: Friday, August 10, 2018 5:52 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Kaul, Monisha <Kaul.Monisha@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Miller, Wynne <Miller.Wynne@epa.gov>
Cc: Keigwin, Richard <Keigwin.Richard@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>
Subject: FW: Dicamba report comparisons

Dicamba folks-See attached from Hema. Hopefully this reduces some of the lift for OPP on capturing the different incident data sources and state restrictions. Also below, Tate provided survey results on dicamba usage.

Have a good weekend,
Kaitlin

Kaitlin Keller, Special Assistant
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
(202) 564-7098

From: Subramanian, Hema
Sent: Friday, August 10, 2018 11:36 AM
To: Keller, Kaitlin <keller.kaitlin@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>
Cc: Bennett, Tate <Bennett.Tate@epa.gov>
Subject: Dicamba report comparisons

Rick and Kaitlin,

I called into the Dicamba update meeting this morning, and heard that BEAD is compiling dicamba info in a central place, to compare the numbers and reports on damage from various sources along with yields, etc.

I had started a spreadsheet where I was informally trying to organize similar notes, so I could see everything together in rows by state. The two tabs in it include:

- Columns from the AAPCO damage report survey (although I hadn't updated them since the July 16 survey)
- Next to those columns--Yield info for cotton, corn, and soybean from NASS (although I hear NASS has new numbers coming out for 2018 any minute now)
- Label restrictions, state restrictions, and suggested proactive measures (from the OCSPB briefing, WSSA report, etc.) – organized by state and then by measure/restriction; (same info I forwarded to you recently copied in a standalone Word table)
- Notes from NASDA and Farm Bureau calls, organized by state

Rather than duplicate efforts, I thought I should forward this table to you, in case it's helpful for you to pass along to whoever is doing a central compilation in BEAD.

Also, below is information Tate shared this morning about a survey coming out by the Illinois Fertilizer & Chemical Association, which may be helpful to fold into the consolidated tracking.

Hope this is helpful, let me know if there are any questions...

---Hema.

Hema Subramanian
Office of the Administrator
U.S. Environmental Protection Agency
Washington, DC
office: (202) 564-5041

From: Bennett, Tate

Sent: Friday, August 10, 2018 10:35 AM

To: Beck, Nancy <Beck.Nancy@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Subramanian, Hema <Subramanian.Hema@epa.gov>

Subject: Ag Retailers Discuss Dicamba

<https://www.dtnpf.com/agriculture/web/ag/perspectives/blogs/production-blog/blog-post/2018/08/10/ag-retailers-discuss-dicamba>

The 113 responses in the survey show a divided membership. Almost 35% of the answers came from central Illinois, which is an area heavily devoted to custom application. In the poll, 90% of the applicators said they sprayed dicamba in 2018. Over 70% said they observed symptoms in adjacent non-dicamba-tolerant soybeans when the wind was not blowing toward the field at the time of application. Nearly 55% said they saw fields where multiple dicamba exposures likely occurred. The finger was pointed at volatility as the primary factor for those symptoms.

Still, the symptoms observed were reported as "light cupping" of soybean leaves, and over 70% ranked weed control in Xtend soybeans as good to excellent.

"Do not apply when sensitive crops are downwind" was ranked as the most difficult aspect of the label for applicators, followed by wind-speed requirements, identifying nearby sensitive crops, inversions, in-field buffers, clean-out procedures, soybean growth cut-off stage, recordkeeping and no pre-sunrise or post-sunset applications. Nozzles were the least difficult aspect.

"What really stood out is this: Dicamba works on weeds and in areas of the state where we have a lot of pressure. However, it is very difficult to keep on target by even the most professional, experienced applicators," Payne told DTN. "We have to define some parameters that work better for the professional applicators."

EPA tacked on additional label restrictions for the 2108 season after off-target movement issues became apparent the previous year, the first year Engenia, FeXapan and XtendiMax were available to use in-season on Xtend crops.

"Not that we need more restrictions, but there are things on that label that need to be better defined (such as the downwind designations), and the registrants have to understand that," Payne said.

"IFCA's position has always been stewardship is important and regulations don't mean anything unless they can be enforced," she added. "I think there's definitely room to better define the language on those labels and still allow use of this product."

The 41-question IFCA survey reveals that, despite challenges, 46% of those commercial applicators still consider the technology to be largely positive when considering all aspects of the dicamba experience. The rest were negative or neutral.

Payne said there's no time to waste if farmers and applicators want a say in this issue. The clock is ticking on the dicamba labels. "Some of these discussions might be uncomfortable, but how much more uncomfortable can we get?"

"The trait is going to be in the field next year, whether we have an approved herbicide or not," Payne noted.

Payne acknowledged that some may balk at the remedies IFCA will likely suggest. Stiff penalties for those who shirk the rules may be included in the suggestions. "But farmers that want this weed control need to embrace compromise because it what may be what allows them to keep it as a tool," she added.

"I'm lucky to work for an organization that would rather be at the table offering ideas, rather than reacting. We have to use pesticides in manner that assures public trust in our industry. Society rightfully expects the agricultural industry to successfully co-exist in increasingly diverse rural and urban communities," she said.

-----Original Message-----

From: Bennett, Tate

Sent: Friday, August 10, 2018 10:30 AM

To: Subramanian, Hema <Subramanian.Hema@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>

Subject: Resource Display | Illinois Fertilizer & Chemical Association

FYI on this survey coming out on dicamba use experiences in IL. Might want to add it to the sheet.

https://www.ifca.com/resource_display/?id=2637

Message

From: Bertrand, Charlotte [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=F044D768E05842E1B75321FF6010E1B8-BERTRAND, CHARLOTTE]
Sent: 9/25/2018 9:29:47 PM
To: Goodis, Michael [Goodis.Michael@epa.gov]
Subject: Re: Dicamba Label Language for Buffers

Thank you

Sent from my iPhone

On Sep 25, 2018, at 5:11 PM, Goodis, Michael <Goodis.Michael@epa.gov> wrote:

Hi Tate,

As requested during the meeting today, below are sections of the dicamba labels that pertain to buffer calculation and what features can be included. Let me know if you have any questions.

Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

From: Baris, Reuben
Sent: Tuesday, September 25, 2018 4:38 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>
Cc: Kenny, Daniel <Kenny.Dan@epa.gov>
Subject: Label language for buffer "exclusions"

The following are the relevant sections for buffer calculations (and what can be included in that calculation) for the engenia and xtendimax labels (Fexapan is the same as xtendimax).

Labels are also attached for reference (Pg. 19 xtendimax:

https://www3.epa.gov/pesticides/chem_search/ppls/000524-00617-20171012.pdf & pg 11 engenia:
https://www3.epa.gov/pesticides/chem_search/ppls/007969-00345-20171012.pdf)

<image001.png>

Xtendimax

<image002.png>

REUBEN BARIS | PRODUCT MANAGER, TEAM 25 | HERBICIDE BRANCH
U.S. ENVIRONMENTAL PROTECTION AGENCY, OFFICE OF PESTICIDE PROGRAMS | (703) 305-7356

Message

From: Keller, Kaitlin [keller.kaitlin@epa.gov]
Sent: 8/29/2018 5:58:29 PM
To: Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]
Subject: RE: Dicamba - Request from the Vice President

Got it. Will send something for review soon.

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 1:58 PM
To: Keller, Kaitlin <keller.kaitlin@epa.gov>
Subject: Re: Dicamba - Request from the Vice President

The person we are briefing will need to start from scratch - has no background on what Dicamba is.

Sent from my iPhone

On Aug 29, 2018, at 1:55 PM, Keller, Kaitlin <keller.kaitlin@epa.gov> wrote:

Yes--If you are okay with the desk statement Cheryl sent at 7am this morning, I will pull from that to update the language on decision-making

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 1:40 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Bolen, Derrick <bolen.derrick@epa.gov>
Cc: Keller, Kaitlin <keller.kaitlin@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Hi - looks like Ryan would like to be on call too. Can you schedule around his calendar as well. Also, Kaitlin can you have a one pager dusted off for me to look at about 4pmish? Thanks.

Sent from my iPhone

Begin forwarded message:

From: "Jackson, Ryan" <jackson.ryan@epa.gov>
Date: August 29, 2018 at 1:29:41 PM EDT
To: "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>
Cc: "Bennett, Tate" <Bennett.Tate@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bolen, Brittany" <bolen.brittany@epa.gov>
Subject: RE: Dicamba - Request from the Vice President

I can be on the call as well. Is there an update I can get on what we plan to present today?

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 12:39 PM
To: Jackson, Ryan <jackson.ryan@epa.gov>
Cc: Bennett, Tate <Bennett.Tate@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bolen, Brittany <bolen.brittany@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Ryan - just wanted to make you aware of this request from the office of the VP for an update on our Dicamba registration decision. We are going to set something up for tomorrow. Tate is joining the call. Charlotte

From: Hickey, Jonathan P. EOP/OVP

Ex. 6 PP – EOP

Sent: Wednesday, August 29, 2018 9:03 AM

To: Goodis, Michael <Goodis.Michael@epa.gov>

Cc: guilaran.you-ting@epa.gov; Keigwin, Richard
<Keigwin.Richard@epa.gov>; Hickey, Jonathan P. EOP/OVP

Ex. 6 PP – EOP

Subject: Introduction & Question

Hi Mike,

Sending you and Richard & Quilaran this note to introduce myself and see if we could schedule a call to help us here at OVP understand an inquiry the Vice President recently recieved.

My name is Jon Hickey and I recently joined the Vice President's Domestic Policy team. Part of my portfolio is Environment. I look forward to working with you and your team!

The Vice President recently received an inquiry from a constituent concerned about Dicamba and the upcoming expiration of the Xtendimax with Vapor Grip Technology Label. Would you have time to discuss this at some point today?

Also, if there is a time when you (and/or whoever you feel appropriate from your team) would have time to meet perhaps next week just to make face-to-face introductions and perhaps to get an overview of the Pesticides Program?

Thanks!

Best regards,

Jon

Jon Hickey

Office of the Vice President

Special Advisor for Domestic Policy

Ex. 6 PP – EOP

Message

From: Baptist, Erik [Baptist.Erik@epa.gov]
Sent: 10/3/2018 1:52:18 PM
To: Bertrand, Charlotte [Bertrand.Charlotte@epa.gov]
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Nothing is ever easy!

Erik Baptist

Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
1201 Constitution Ave., NW
Washington, DC 20460
(202) 564-1689
baptist.erik@epa.gov

From: Bertrand, Charlotte
Sent: Wednesday, October 3, 2018 9:52 AM
To: Strauss, Linda <Strauss.Linda@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

I recommend removing the word 'easily' from the first paragraph.

From: Strauss, Linda
Sent: Wednesday, October 03, 2018 9:48 AM
To: Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Dunton, Cheryl <Dunton.Cheryl@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Got it. Thanks.

From: Baptist, Erik
Sent: Wednesday, October 03, 2018 9:44 AM
To: Beck, Nancy <Beck.Nancy@epa.gov>; Strauss, Linda <Strauss.Linda@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>
Subject: RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Suggested edits below:

EPA considers all studies and our analysis gives weight to high quality and well-documented studies. The Agency looks at the all of the evidence to inform our decision~~decide what the preponderance of evidence shows.~~ EPA registered dicamba (with restrictions on its use) but placed time limits on the registration to allow the agency to either let it expire or to easily make the necessary changes in the registration if there are problems with resistant weeds or pesticide drift.

EPA continues to receive information from stakeholders regarding the use of dicamba for over-the-top applications. EPA will use all available evidence when evaluating registrations for over-the-top use of dicamba. We expect to make a decision in the near future.

Erik Baptist

Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
1201 Constitution Ave., NW
Washington, DC 20460
(202) 564-1689
baptist.erik@epa.gov

From: Beck, Nancy**Sent:** Wednesday, October 3, 2018 9:35 AM**To:** Strauss, Linda <Strauss.Linda@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>**Subject:** RE: Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

I'm ok. Erik/Charlotte?

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator, OCSPP
P: 202-564-1273
beck.nancy@epa.gov

From: Strauss, Linda**Sent:** Wednesday, October 3, 2018 8:18 AM**To:** Beck, Nancy <Beck.Nancy@epa.gov>; Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>**Subject:** Center for Investigative Reporting - Dicamba - deadline request to speak with Reuben Barris

Incoming below. They are looking for an interview but we propose a general statement back.

Response:

EPA considers all studies and our analysis gives weight to high quality and well-documented studies. The Agency looks at the all of the evidence to decide what the preponderance of evidence shows. EPA registered dicamba (with restrictions on its use) but placed time limits on the registration to allow the agency to either let it expire or to easily make the necessary changes in the registration if there are problems with resistant weeds or pesticide drift.

EPA continues to receive information from stakeholders regarding the use of dicamba for over-the-top applications. EPA will use all available evidence when evaluating registrations for over-the-top use of dicamba. We expect to make a decision in the near future.

From: Daguillard, Robert**Sent:** Monday, October 1, 2018 4:07 PM**To:** Strauss, Linda <Strauss.Linda@epa.gov>; Dunton,

Cheryl <Dunton.Cheryl@epa.gov>; Courtnage, Robert
<Courtnage.Robert@EPA.GOV>; Sisco, Debby
<Sisco.Debby@epa.gov>; Han, Kaythi
<Han.Kaythi@epa.gov>; Dinkins, Darlene
<Dinkins.Darlene@epa.gov>

Subject: LINDA/OPP: Center for Investigative Reporting
- Dicamba - deadline request to speak with Reuben
Barris

**CENTER FOR INVESTIGATIVE
REPORTING**

LIZA GROSS

DDL 10/3, WEDNESDAY

Good afternoon everyone,

I assume we'll want to send written responses? Let
me know if you want to discuss.

Thanks, R.

++++
+++++

OK, great. Here's what I'd like to discuss:

When does EPA expect to decide whether to
reregister dicamba for the dicamba-resistant
crops?

In the initial registration of Xtendimax, Monsanto's dicamba product (M1768), EPA relied on humidome studies, which the literature shows are not good proxies for what goes on in the field (and new studies by university scientists support). In addition, the field studies were done under conditions and in locales that would not reflect conditions in the midsouth. What convinced EPA that these studies were enough to allow a compound with a history of volatility, especially under conditions in the midsouth, on the market?

Academic scientists, including David Mortensen, had warned that pesticides act much differently when you increase amounts and acreage, and that doing so with dicamba, which is responsible for more drift injuries (along with 2,4D) than any other herbicides, would lead to disaster. Why were these concerns, based on rigorous science, not heeded?

Many academic scientists I spoke with said that they advised EPA officials in calls and meetings that low volatility formulations are not the same as no volatility and can still cause serious harm. They said label changes wouldn't solve the problem. How did the EPA decide to allow Monsanto and other registrants to submit label changes that scientists said no one can follow?

Many people in Missouri and Arkansas have sustained serious economic losses and are getting no relief from their state agricultural departments. What role does EPA see for themselves in this situation? What message do you have for people who blame EPA for approving a product that has caused them so much harm?

That's mostly what I want to discuss.

Thanks, Robert.

Dear press officers,

I'm working on a story about dicamba for Reveal, from the Center for Investigative Reporting, and need to speak with Reuben Barris or another official in the herbicide branch. Please let me know when I can speak to someone.

Thank you.

Sincerely,

Liza Gross

Liza Gross

Journalist/editor based in the San Francisco Bay Area

The Science Writers' Investigative Reporting Handbook

[Available on Amazon](#)

www.lizagross.com

@lizabio on Twitter

liza.m.gross on Skype

+1.510.525.2494 (office)

+1.510.295.9391 (cell/Signal)

--

Sent from my phone. Pardon the typos.

Message

From: Bertrand, Charlotte [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=F044D768E05842E1B75321FF6010E1B8-BERTRAND, CHARLOTTE]
Sent: 8/29/2018 5:56:57 PM
To: Keller, Kaitlin [keller.kaitlin@epa.gov]
Subject: Re: Dicamba - Request from the Vice President

Ok. Let's keep it all to one page. Thanks.

Sent from my iPhone

On Aug 29, 2018, at 1:55 PM, Keller, Kaitlin <keller.kaitlin@epa.gov> wrote:

Yes--If you are okay with the desk statement Cheryl sent at 7am this morning, I will pull from that to update the language on decision-making

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 1:40 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>; Bolen, Derrick <bolen.derrick@epa.gov>
Cc: Keller, Kaitlin <keller.kaitlin@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Hi - looks like Ryan would like to be on call too. Can you schedule around his calendar as well. Also, Kaitlin can you have a one pager dusted off for me to look at about 4pmish? Thanks.

Sent from my iPhone

Begin forwarded message:

From: "Jackson, Ryan" <jackson.ryan@epa.gov>
Date: August 29, 2018 at 1:29:41 PM EDT
To: "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>
Cc: "Bennett, Tate" <Bennett.Tate@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>, "Beck, Nancy" <Beck.Nancy@epa.gov>, "Bolen, Brittany" <bolen.brittany@epa.gov>
Subject: RE: Dicamba - Request from the Vice President

I can be on the call as well. Is there an update I can get on what we plan to present today?

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 12:39 PM
To: Jackson, Ryan <jackson.ryan@epa.gov>
Cc: Bennett, Tate <Bennett.Tate@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Beck, Nancy <Beck.Nancy@epa.gov>; Bolen, Brittany <bolen.brittany@epa.gov>
Subject: Fwd: Dicamba - Request from the Vice President

Ryan - just wanted to make you aware of this request from the office of the VP for an update on our Dicamba registration decision. We are going to set something up for tomorrow. Tate is joining the call. Charlotte

From: Hickey, Jonathan P. EOP/OVP

Ex. 6 PP – EOP

Sent: Wednesday, August 29, 2018 9:03 AM

To: Goodis, Michael <Goodis.Michael@epa.gov>

Cc: guilaran.you-ting@epa.gov; Keigwin, Richard <Keigwin.Richard@epa.gov>; Hickey, Jonathan P. EOP/OVP

Ex. 6 PP – EOP

Subject: Introduction & Question

Hi Mike,

Sending you and Richard & Quilaran this note to introduce myself and see if we could schedule a call to help us here at OVP understand an inquiry the Vice President recently recieved.

My name is Jon Hickey and I recently joined the Vice President's Domestic Policy team. Part of my portfolio is Environment. I look forward to working with you and your team!

The Vice President recently received an inquiry from a constituent concerned about Dicamba and the upcoming expiration of the Xtendimax with Vapor Grip Technology Label. Would you have time to discuss this at some point today?

Also, if there is a time when you (and/or whoever you feel appropriate from your team) would have time to meet perhaps next week just to make face-to-face introductions and perhaps to get an overview of the Pesticides Program?

Thanks!

Best regards,

Jon

Jon Hickey

Office of the Vice President

Special Advisor for Domestic Policy

Ex. 6 PP – EOP

Message

From: Bertrand, Charlotte [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=F044D768E05842E1B75321FF6010E1B8-BERTRAND, CHARLOTTE]
Sent: 8/29/2018 4:30:59 PM
To: Bennett, Tate [Bennett.Tate@epa.gov]
CC: Baptist, Erik [Baptist.Erik@epa.gov]
Subject: Re: Dicamba - Request from the Vice President

Yes! Thank you!

Sent from my iPhone

On Aug 29, 2018, at 12:29 PM, Bennett, Tate <Bennett.Tate@epa.gov> wrote:

I'd like to be on the call, if possible.

On Aug 29, 2018, at 12:24 PM, Goodis, Michael <Goodis.Michael@epa.gov> wrote:

Thanks Charlotte

Sounds good. He said tomorrow would work for him. I will wait to hear back.

Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

From: Bertrand, Charlotte
Sent: Wednesday, August 29, 2018 12:21 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>
Cc: Beck, Nancy <Beck.Nancy@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Bennett, Tate <Bennett.Tate@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Keller, Kaitlin <keller.kaitlin@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>
Subject: Re: Dicamba - Request from the Vice President

Mike - Nancy is traveling out of the country this week and I'm in Vermont today. Tomorrow would be a better day for scheduling a discussion. I'll check to see if others in the AO may want to join us. Charlotte

Sent from my iPhone

On Aug 29, 2018, at 12:09 PM, Goodis, Michael <Goodis.Michael@epa.gov> wrote:

Hi Nancy

Please see the request below from the Vice President's office regarding the EPA's pending registration decision for the dicamba products.

I called Jon Hickey (Special Advisor for Domestic Policy, Office of the VP) back just to let him know we received the request and to get a better understanding of what is being requested and why.

What he communicated is that a constituent in IN contacted the Vice President to voice a concern that additional application restrictions are needed if the registration is continued and the Vice President what to better know what the EPA intends to do so he can respond the person. I let him know that we can arrange a time to discuss this issue with him, but that I needed to let the right people in the agency know about the request and so we have the right people on the call.

Jon requested a time today or tomorrow to have a phone discussion with him, following which he intends to prepare a 1-pager based on the information provided for the Vice President.

Please let me know how you would like to proceed. Thanks

Michael L. Goodis, P.E.

Director, Registration Division (RD)

Office of Pesticide Programs (OPP)

Phone 703-308-8157

Room S7623

From: Hickey, Jonathan P. EOP/OVP

Ex. 6 PP – EOP

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To: Goodis, Michael <Goodis.Michael@epa.gov>

Cc: guilaran.you-ting@epa.gov; Keigwin, Richard <Keigwin.Richard@epa.gov>; Hickey, Jonathan P. EOP/OVP

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Thanks!

Best regards,
Jon

Jon Hickey
Office of the Vice President
Special Advisor for Domestic Policy

Ex. 6 PP – EOP

Message

From: Keller, Kaitlin [keller.kaitlin@epa.gov]
Sent: 8/29/2018 4:25:39 PM
To: Bolen, Derrick [bolen.derrick@epa.gov]
Subject: FW: Dicamba - Request from the Vice President

FYI for tomorrow.

From: Goodis, Michael
Sent: Wednesday, August 29, 2018 12:24 PM
To: Bertrand, Charlotte <Bertrand.Charlotte@epa.gov>
Cc: Beck, Nancy <Beck.Nancy@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Bennett, Tate <Bennett.Tate@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Keller, Kaitlin <keller.kaitlin@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>
Subject: RE: Dicamba - Request from the Vice President

Thanks Charlotte

Sounds good. He said tomorrow would work for him. I will wait to hear back.

Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

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Sent: Wednesday, August 29, 2018 12:21 PM
To: Goodis, Michael <Goodis.Michael@epa.gov>
Cc: Beck, Nancy <Beck.Nancy@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>; Bennett, Tate <Bennett.Tate@epa.gov>; Keigwin, Richard <Keigwin.Richard@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Keller, Kaitlin <keller.kaitlin@epa.gov>; Guilaran, Yu-Ting <Guilaran.Yu-Ting@epa.gov>
Subject: Re: Dicamba - Request from the Vice President

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Sent from my iPhone

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Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

From: Hickey, Jonathan P. EOP/OVP [Ex. 6 PP – EOP]
Sent: Wednesday, August 29, 2018 9:03 AM
To: Goodis, Michael <Goodis.Michael@epa.gov>
Cc: guilaran.you-ting@epa.gov; Keigwin, Richard <Keigwin.Richard@epa.gov>; Hickey, Jonathan P. EOP/OVP [Ex. 6 PP – EOP]
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Thanks!

Best regards,
Jon

Jon Hickey
Office of the Vice President
Special Advisor for Domestic Policy

[Ex. 6 PP – EOP]

Message

From: Bolen, Derrick [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1FFC58B0468C4DECA51A8BAD735B7D95-BOLEN, DERR]
Sent: 8/30/2018 6:44:24 PM
To: Goodis, Michael [Goodis.Michael@epa.gov]
Subject: RE: 2pm EPA Call

Yes, thank you.

From: Goodis, Michael
Sent: Thursday, August 30, 2018 2:44 PM
To: Bolen, Derrick <bolen.derrick@epa.gov>
Subject: FW: 2pm EPA Call

Hi Derrick

I assume you are following up with him with the information?

Michael L. Goodis, P.E.
Director, Registration Division (RD)
Office of Pesticide Programs (OPP)

Phone 703-308-8157
Room S7623

From: Hickey, Jonathan P. EOP/OVP [Ex. 6 PP – EOP]
Sent: Thursday, August 30, 2018 2:25 PM
To: Bolen, Derrick <bolen.derrick@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>
Cc: Hickey, Jonathan P. EOP/OVP [Ex. 6 PP – EOP]
Subject: RE: 2pm EPA Call

Mike / Derrick,

We just completed a great call with Chief of Staff Ryan Jackson, Ms. Charlotte Bertrand, and Ms. Tate Bennett. Would it be possible to get their e-mails/contact info/titles so that I can keep in contact with them?

Thank you!
Jon

Jon Hickey
Office of the Vice President

[Ex. 6 PP – EOP]

From: Bolen, Derrick <bolen.derrick@epa.gov>
Sent: Thursday, August 30, 2018 2:05 PM
To: Hickey, Jonathan P. EOP/OVP [Ex. 6 PP – EOP]
Subject: RE: 2pm EPA Call

Sorry, apparently now we are back to a conference line. Please use (Call in Number [Ex. 6 PP - conference code/call in number])
[Ex. 6 PP - conference code/call in number]

Thank you,
Derrick Bolen

From: Hickey, Jonathan P. EOP/OVP [Ex. 6 PP – EOP]
Sent: Thursday, August 30, 2018 1:59 PM
To: Bolen, Derrick <bolen.derrick@epa.gov>
Subject: RE: 2pm EPA Call

Roger that, Derrick. Thanks!

Jon

Jon Hickey
Office of the Vice President

[Ex. 6 PP – EOP]

From: Bolen, Derrick <bolen.derrick@epa.gov>
Sent: Thursday, August 30, 2018 1:57 PM
To: Hickey, Jonathan P. EOP/OVP [Ex. 6 PP – EOP]
Subject: 2pm EPA Call

Jon-

Change of plans. The 2pm call will now be a direct call to you instead of using a conference line.

Thank you,

Derrick Bolen

From: Hickey, Jonathan P. EOP/OVP [Ex. 6 PP – EOP]
Sent: Wednesday, August 29, 2018 9:03 AM
To: Goodis, Michael <Goodis.Michael@epa.gov>
Cc: guilaran.you-ting@epa.gov; Keigwin, Richard <Keigwin.Richard@epa.gov>; Hickey, Jonathan P. EOP/OVP
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Subject: Introduction & Question

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Thanks!

Best regards,

Jon

Jon Hickey

Office of the Vice President

Special Advisor for Domestic Policy

Ex. 6 PP – EOP

Message

From: Bolen, Derrick [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1FFC58B0468C4DECA51A8BAD735B7D95-BOLEN, DERR]
Sent: 9/21/2018 6:10:34 PM
To: Lovell, Will (William) [lovell.william@epa.gov]
Subject: FW: 90-Day Cabinet Report 9.11.2018

From: Baptist, Erik
Sent: Thursday, September 20, 2018 9:40 PM
To: Beck, Nancy <Beck.Nancy@epa.gov>; Bolen, Derrick <bolen.derrick@epa.gov>
Subject: RE: 90-Day Cabinet Report 9.11.2018

Just one edit (I agree – the acres planted would show the significant):

1. **DICAMBA:** In late 2016, EPA placed a 2-year limit on the new registrations for dicamba pesticide products used on soybean and cotton crops that ~~are have been genetically engineered to tolerate dicamba once the plants have emerged (“over the top”)~~. Registrations of dicamba for use on ~~genetically modified~~ cotton and soybeans begin expiring in November 2018 unless EPA determines that extending the registration meets applicable legal standards. EPA is using the best available information from several sources to develop a decision that balances protection of the environment with the benefits this technology offers growers for weed control and crop production.

Erik Baptist
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
U.S. Environmental Protection Agency
1201 Constitution Ave., NW
Washington, DC 20460
(202) 564-1689
baptist.erik@epa.gov

From: Beck, Nancy
Sent: Thursday, September 20, 2018 6:41 PM
To: Bolen, Derrick <bolen.derrick@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>
Subject: RE: 90-Day Cabinet Report 9.11.2018

Suggestions below to simply distractions. Erik- other thoughts?
Should we add a sentence about acres planted to give a sense of the importance of the technology?

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator, OCSP
P: 202-564-1273
M: Ex. 6 PP - personal phone
beck.nancy@epa.gov

From: Bolen, Derrick
Sent: Thursday, September 20, 2018 5:51 PM

To: Beck, Nancy <Beck.Nancy@epa.gov>; Baptist, Erik <Baptist.Erik@epa.gov>

Subject: FW: 90-Day Cabinet Report 9.11.2018

Thoughts?

From: Lovell, Will (William)

Sent: Thursday, September 20, 2018 5:49 PM

To: Bolen, Derrick <bolen.derrick@epa.gov>

Subject: RE: 90-Day Cabinet Report 9.11.2018

How about this? Do we know what the decision will be?:

1. **DICAMBA:** EPA placed a 2-year limit on the registrations for dicamba pesticide products used on soybean and cotton crops that are ~~have been genetically~~ engineered to tolerate dicamba ~~once the plants have emerged~~ ("over the top"). Registrations of dicamba for use on ~~genetically modified~~ cotton and soybeans begin expiring in November 2018 unless EPA determines that extending the registration meets applicable legal standards. EPA is using the best available information from several sources to develop a decision that balances protection of the environment with the benefits this technology offers growers for weed control and crop production.

Timing: EPA plans to make a decision in October to give growers time to make informed seed purchase decisions for the next planting season.

Contact: Nancy Beck, Office of Chemical Safety and Pollution Prevention, Beck.Nancy@epa.gov

From: Bolen, Derrick

Sent: Thursday, September 20, 2018 8:04 AM

To: Lovell, Will (William) <lovell.william@epa.gov>

Subject: Re: 90-Day Cabinet Report 9.11.2018

Here is what I have.

EPA will use all available evidence when evaluating registrations for over-the-top use of dicamba. Our goal is to make a decision in time for growers to make informed seed purchase decisions for the next planting season.

Background:

EPA placed a 2-year limit on the registrations for dicamba pesticide products (Xtendimax with Vapor Grip; Engenia; and DuPont's FeXapan Herbicide) used on soybean and cotton crops that have been genetically engineered to tolerate dicamba once the plants have emerged ("over the top"). EPA placed this time limit on the registrations to allow us either to let them expire or to work with the registrants to make necessary changes in the registration that may be necessary to address any concerns about adverse effects related to the application of these products. Registrations of dicamba for use on genetically modified cotton and soybeans begin expiring in November 2018 unless EPA determines that extending the registration meets applicable legal standards.

We are reviewing the current use restrictions on the labels for these dicamba formulations in light of the incidents that have been reported this year and in 2017. EPA is using the best available information from several sources to develop a decision that balances protection of the environment with the benefits this technology offers growers for weed control and crop production. EPA will consider both quantitative and qualitative information to make our decision. EPA is working closely with academia, growers, state officials, weed management experts, industry, and the public to gather available information that helps us make our decision, including:

- * incident data,
- * yield information (or potential impacts on yield),
- * off-target impacts to plants, including non-dicamba-tolerant soybeans,

- * conversations with individuals in the field, and
- * narrative information contained in state reports.

Thank you,
Derrick Bolen

On Sep 20, 2018, at 6:12 AM, Lovell, Will (William) <lovell.william@epa.gov> wrote:

Do we have a press release on that? Or a desk statement?

Sent from my iPhone

On Sep 19, 2018, at 11:21 PM, Bolen, Derrick <bolen.derrick@epa.gov> wrote:

Should we mention the dicamba decision in this?

Thank you,
Derrick Bolen

On Sep 19, 2018, at 10:27 AM, Lovell, Will (William) <lovell.william@epa.gov> wrote:

New report attached.

From: Lovell, Will (William)
Sent: Tuesday, September 11, 2018 6:57 PM
To: Bolen, Derrick <bolen.derrick@epa.gov>
Subject: 90-Day Cabinet Report 9.11.2018

Derrick,

Please find attached this week's 90-day Cabinet report. Please let me know if OCSPP has any edits, additions, or deletions.

In particular, what would you think about including an entry on the prioritization action? I would be happy to draft something based on OCSPP's submission to the weekly report:

Within the next 1-2 weeks, OCSPP expects to publicly release the approach it will use to identify chemicals that could be included in the next group of risk evaluations under TSCA. Additionally, OCSPP will announce that it is looking for input from the public on which chemicals should be prioritized for risk evaluation and which chemicals may be low priorities under TSCA. The process document being released lays out OCSPP's near-term approach for identifying potential chemicals for prioritization, the initial step in evaluating the safety of existing chemicals under TSCA. This approach reflects public input received at a December 2017 meeting and through the public docket. By December 2019, EPA must designate at least 20 chemical substances as High-Priority for risk evaluation and 20 chemical substances as Low-Priority for which risk evaluation is not warranted. The document also includes a longer-term strategy for managing the larger TSCA chemical landscape,

which, according to the TSCA Inventory, is composed of more than 40,000 active chemicals.

Thanks,

Will Lovell

Policy Advisor, Office of Policy
U.S. Environmental Protection Agency
(202) 564-5713
Lovell.William@epa.gov

<EPA 90-Day Look Ahead 9.18.2018.docx>

Message

From: Bolen, Derrick [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1FFC58B0468C4DECA51A8BAD735B7D95-BOLEN, DERR]
Sent: 9/20/2018 9:52:06 PM
To: Lovell, Will (William) [lovell.william@epa.gov]
Subject: RE: 90-Day Cabinet Report 9.11.2018

Checking.

From: Lovell, Will (William)
Sent: Thursday, September 20, 2018 5:49 PM
To: Bolen, Derrick <bolen.derrick@epa.gov>
Subject: RE: 90-Day Cabinet Report 9.11.2018

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Thank you,
Derrick Bolen

On Sep 19, 2018, at 10:27 AM, Lovell, Will (William) <lovell.william@epa.gov> wrote:

New report attached.

From: Lovell, Will (William)
Sent: Tuesday, September 18, 2018 8:25 AM
To: Bolen, Derrick <bolen.derrick@epa.gov>
Subject: RE: 90-Day Cabinet Report 9.11.2018

Did you get a chance to think about this?

From: Lovell, Will (William)
Sent: Tuesday, September 11, 2018 6:57 PM
To: Bolen, Derrick <bolen.derrick@epa.gov>
Subject: 90-Day Cabinet Report 9.11.2018

Derrick,

Please find attached this week's 90-day Cabinet report. Please let me know if OCSPP has any edits, additions, or deletions.

In particular, what would you think about including an entry on the prioritization action? I would be happy to draft something based on OCSPP's submission to the weekly report:

Within the next 1-2 weeks, OCSPP expects to publicly release the approach it will use to identify chemicals that could be included in the next group of risk evaluations under TSCA. Additionally, OCSPP will announce that it is looking for input from the public on which chemicals should be prioritized for risk

evaluation and which chemicals may be low priorities under TSCA. The process document being released lays out OCSPP's near-term approach for identifying potential chemicals for prioritization, the initial step in evaluating the safety of existing chemicals under TSCA. This approach reflects public input received at a December 2017 meeting and through the public docket. By December 2019, EPA must designate at least 20 chemical substances as High-Priority for risk evaluation and 20 chemical substances as Low-Priority for which risk evaluation is not warranted. The document also includes a longer-term strategy for managing the larger TSCA chemical landscape, which, according to the TSCA Inventory, is composed of more than 40,000 active chemicals.

Thanks,

Will Lovell

Policy Advisor, Office of Policy
U.S. Environmental Protection Agency
(202) 564-5713
Lovell.William@epa.gov

<EPA 90-Day Look Ahead 9.18.2018.docx>

Message

From: Bolen, Derrick [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1FFC58B0468C4DECA51A8BAD735B7D95-BOLEN, DERR]
Sent: 9/20/2018 12:04:29 PM
To: Dunton, Cheryl [Dunton.Cheryl@epa.gov]
Subject: Re: Desk statement

Thanks!

> On Sep 20, 2018, at 8:03 AM, Dunton, Cheryl <Dunton.Cheryl@epa.gov> wrote:
>
> EPA will use all available evidence when evaluating registrations for over-the-top use of dicamba. Our goal is to make a decision in time for growers to make informed seed purchase decisions for the next planting season.
>
> Background:
> EPA placed a 2-year limit on the registrations for dicamba pesticide products (Xtendimax with Vapor Grip; Engenia; and DuPont's FeXapan Herbicide) used on soybean and cotton crops that have been genetically engineered to tolerate dicamba once the plants have emerged ("over the top"). EPA placed this time limit on the registrations to allow us either to let them expire or to work with the registrants to make necessary changes in the registration that may be necessary to address any concerns about adverse effects related to the application of these products. Registrations of dicamba for use on genetically modified cotton and soybeans begin expiring in November 2018 unless EPA determines that extending the registration meets applicable legal standards.
>
> We are reviewing the current use restrictions on the labels for these dicamba formulations in light of the incidents that have been reported this year and in 2017. EPA is using the best available information from several sources to develop a decision that balances protection of the environment with the benefits this technology offers growers for weed control and crop production. EPA will consider both quantitative and qualitative information to make our decision. EPA is working closely with academia, growers, state officials, weed management experts, industry, and the public to gather available information that helps us make our decision, including:
> * incident data,
> * yield information (or potential impacts on yield),
> * off-target impacts to plants, including non-dicamba-tolerant soybeans,
> * conversations with individuals in the field, and
> * narrative information contained in state reports.
>
> -----Original Message-----
> From: Bolen, Derrick
> Sent: Thursday, September 20, 2018 8:01 AM
> To: Dunton, Cheryl <Dunton.Cheryl@epa.gov>
> Subject: Desk statement
>
> Do you have the most recent desk statement on the dicamba decision?
>
> Thank you,
> Derrick Bolen

Message

From: Kaul, Monisha [Kaul.Monisha@epa.gov]
Sent: 7/17/2018 1:32:04 PM
To: Chism, William [Chism.Bill@epa.gov]
Subject: RE: Dicamba: WSSA questions
Attachments: RE: Questions for WSSA

Bill- I just got approval from Rick on the questions last night and that's why I hadn't been in touch with you to give you the green light. Here is the revision from Rick. Can you please resend? Thanks. -Monisha

1. Are there any label clarifications ~~or regulatory changes~~ WSSA would suggest that would help enhance product utility or address concerns for off target movement?
2. How well is the dicamba resistant technology working for weed management in cotton and soybeans? Please explain.
3. In your opinion, how do the dicamba resistant cotton and soybean yields compare to the non-dicamba resistant crop for 2017? How much of this is due to the technology or to improved weed control?
4. Do you know the typical application rate and typical number of applications of dicamba on dicamba resistant crops?
5. Does WSSA have data or information related to the off-field movement issues, including any reported incidents?

From: Chism, William
Sent: Tuesday, July 17, 2018 9:08 AM
To: Kaul, Monisha <Kaul.Monisha@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>
Cc: Meadows, Sarah <Meadows.Sarah@epa.gov>; Jones, Arnet <Jones.Arnet@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>; Becker, Jonathan <Becker.Jonathan@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Goerke, Ariadne <Goerke.Ariadne@epa.gov>; Knorr, Michele <knorr.michele@epa.gov>
Subject: RE: Dicamba: WSSA questions

Hello Everyone

This is the message I sent to Greg Kruger or WSSA liaison this morning. In order to reduce the amount of email I included Dan Kenny, Dan Rosenblatt, Monisha Kaul on the original email. Sorry I didn't get this out on Friday I was temporarily diverted on a different topic.

Bill

Hello Greg

The Agency is concerned about off target effects reported for dicamba and would like the WSSA to help collect some information. Because the Agency needs to make a decision this year on the registration of dicamba on dicamba tolerant crops we would like whatever information you are able to collect by mid-August.

1. Are there any label or regulatory changes WSSA would suggest that would help enhance products utility or address concerns for off target movement?
2. How well is the dicamba resistant technology working for weed management in cotton and soybeans? Please explain.
3. In your opinion, how do the dicamba resistant cotton and soybean yields compare to the non-dicamba resistant crop for 2017? How much of this is due to the technology or to improved weed control?
4. Do you know the typical application rate and typical number of applications of dicamba on dicamba resistant crops?
5. Does WSSA have data or information related to the off-field movement issues, including any reported incidents?

Thank you for your help. Bill

Bill Chism, Ph.D.
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(703) 308-8136
chism.bill@epa.gov

From: Kaul, Monisha
Sent: Thursday, July 12, 2018 1:58 PM
To: Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>
Cc: Meadows, Sarah <Meadows.Sarah@epa.gov>; Chism, William <Chism.Bill@epa.gov>; Jones, Arnet <Jones.Arnet@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>; Becker, Jonathan <Becker.Jonathan@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Goerke, Ariadne <Goerke.Ariadne@epa.gov>; Knorr, Michele <knorr.michele@epa.gov>
Subject: RE: Dicamba: WSSA questions

We (Bill) can send the questions and that timeframe seems reasonable.

From: Rosenblatt, Daniel
Sent: Thursday, July 12, 2018 12:22 PM
To: Kaul, Monisha <Kaul.Monisha@epa.gov>
Cc: Meadows, Sarah <Meadows.Sarah@epa.gov>; Chism, William <Chism.Bill@epa.gov>; Jones, Arnet <Jones.Arnet@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>; Becker, Jonathan <Becker.Jonathan@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Goerke, Ariadne <Goerke.Ariadne@epa.gov>; Knorr, Michele <knorr.michele@epa.gov>
Subject: Re: Dicamba: WSSA questions

I like the questions and the suggested change.

One process thing to cover and just confirm on next steps- will BEAD be transmitting the Q's to WSSA? And second - what are we thinking could be the timing on this? Meaning how long will we give WSSA to develop their feedback? I'm sure this will be hard to meet - but I'd throw out that we probably need a response by mid- August at the latest. (Which might make the Q about yields hard to answer). But what do you all think of that?

Sent from my iPhone

On Jul 12, 2018, at 11:24 AM, Kaul, Monisha <Kaul.Monisha@epa.gov> wrote:

Hi all- I just spoke with Ariadne. She suggested the changes below. Please get back to me asap today if you have any changes. We will send back to Rick this afternoon for review. Thanks everyone! -Monisha

From: Meadows, Sarah
Sent: Wednesday, July 11, 2018 1:58 PM
To: Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>; Kaul, Monisha <Kaul.Monisha@epa.gov>; Goerke, Ariadne <Goerke.Ariadne@epa.gov>; Chism, William <Chism.Bill@epa.gov>; Jones, Arnet <Jones.Arnet@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>; Becker, Jonathan <Becker.Jonathan@epa.gov>; Hathaway, Margaret

<Hathaway.Margaret@epa.gov>; Knorr, Michele <knorr.michele@epa.gov>

Subject: RE: Dicamba: WSSA questions

Hi, all. Here are our revised questions for WSSA, for final OGC review.

1. Are there any label or regulatory changes WSSA would suggest that would help enhance ~~these~~ products utility or address concerns for off target movement?
2. How well is the dicamba resistant technology working for weed management in cotton and soybeans? Please explain.
3. In your opinion, how do the dicamba resistant cotton and soybean yields compare to the non-dicamba resistant crop for 2017? How much of this is due to the technology or to improved weed control?
4. Do you know the typical application rate and typical number of applications of dicamba on dicamba resistant crops?
5. Does WSSA have data or information related to the off-field movement issues, including any reported incidents?

From: Rosenblatt, Daniel

Sent: Wednesday, July 11, 2018 1:38 PM

To: Kaul, Monisha <Kaul.Monisha@epa.gov>; Goerke, Ariadne <Goerke.Ariadne@epa.gov>; Chism, William <Chism.Bill@epa.gov>; Jones, Arnet <Jones.Arnet@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>; Becker, Jonathan <Becker.Jonathan@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Knorr, Michele <knorr.michele@epa.gov>

Subject: RE: Dicamba: WSSA questions

Revised Q – 1:

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

New Q: Does WSSA have data or information related to the off-field movement issues?

-----Original Appointment-----

From: Kaul, Monisha

Sent: Wednesday, July 11, 2018 10:43 AM

To: Kaul, Monisha; Goerke, Ariadne; Chism, William; Jones, Arnet; Rosenblatt, Daniel; Hawkins, Caleb; Meadows, Sarah; Becker, Jonathan; Hathaway, Margaret; Knorr, Michele

Subject: Dicamba: WSSA questions

When: Wednesday, July 11, 2018 1:00 PM-1:30 PM (UTC-05:00) Eastern Time (US & Canada).

Where: DCRoomPYS9771/Potomac-Yard-One

Call in number: Ex. 6 PP - conference code/call in number

Conference ID: Ex. 6 PP - conference code/call in number

Hi Monisha,

Please give me a call when you have a chance and we can talk through Michele's comments. Thanks!
Ariadne

Ariadne Goerke
Pesticides and Toxic Substances Law Office
Office of General Counsel, U.S. EPA
202-564-5471 Rm 7318B

From: Knorr, Michele

Sent: Tuesday, July 10, 2018 2:33 PM

To: Goerke, Ariadne <Goerke.Ariadne@epa.gov>

Subject: WSSA questions - my thoughts

WSSA Questions

1.

Ex. 5 AC/DP

2. How well is the dicamba resistant technology working for weed management in cotton and soybeans? Please explain.
3. In your opinion, how do the dicamba resistant cotton and soybean yields compare to the non-dicamba resistant crop for 2017? How much of this is due to the technology or to improved weed control?
4. Do you know the typical application rate and typical number of applications of dicamba on dicamba resistant crops?

Message

From: Chism, William [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=475879B16C29401A9449DDB69D5F7EB1-WILLIAM CHISM]
Sent: 9/7/2018 1:30:35 PM
To: Meadows, Sarah [Meadows.Sarah@epa.gov]
Subject: RE: Dicamba registration - could you word smith this?

Oops.
Why yes I do.
☺

Bill Chism
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(703) 308-8136
chism.bill@epa.gov

From: Meadows, Sarah
Sent: Friday, September 07, 2018 9:29 AM
To: Chism, William <Chism.Bill@epa.gov>
Subject: RE: Dicamba registration - could you word smith this?

No problem. One thing I just thought of - do you want to mention Engenia as well? https://www3.epa.gov/pesticides/chem_search/ppls/007969-00345-20161220.pdf

From: Chism, William
Sent: Friday, September 07, 2018 9:03 AM
To: Meadows, Sarah <Meadows.Sarah@epa.gov>
Subject: RE: Dicamba registration - could you word smith this?

Thank you so much.

Bill

Bill Chism
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(703) 308-8136
chism.bill@epa.gov

From: Meadows, Sarah
Sent: Friday, September 07, 2018 9:02 AM
To: Chism, William <Chism.Bill@epa.gov>
Subject: RE: Dicamba registration - could you word smith this?

Hi, Bill. This looks fine. The product was actually registered in 2014, but the new brand name of Xtendimax and the new uses were registered in 2016. The way you have it worded covers that.

Here is the link to the registration letter if you want to describe any of the other conditions:

https://www3.epa.gov/pesticides/chem_search/ppls/000524-00617-20161109.pdf

Sarah

From: Chism, William

Sent: Friday, September 07, 2018 8:39 AM

To: Meadows, Sarah <Meadows.Sarah@epa.gov>

Subject: Dicamba registration - could you word smith this?

Hi Sarah

To explain why we are conducting another benefits assessment we would like to describe the registration. Could you fix this text?

In 2016 the EPA registered a dicamba formulation, Xtendimax™ with VaporGrip™ Technology to control weeds in cotton and soybean plants that have been genetically engineered (GE) to resist dicamba. The registration is time-limited and will automatically expire after two years on November 9, 2018.

Thanks. Bill

Bill Chism

Senior Biologist

Biological and Economic Analysis Division

U.S. EPA/Office of Pesticide Programs

(703) 308-8136

chism.bill@epa.gov

Message

From: Chism, William [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=475879B16C29401A9449DDB69D5F7EB1-WILLIAM CHISM]
Sent: 9/4/2018 7:44:30 PM
To: Tindall, Kelly [tindall.kelly@epa.gov]
Subject: RE: BEAD Coordination on Registration Division Projects

Thanks Kelly

I added this to the economic section for soybeans.

Bill

Bill Chism
Senior Biologist
Biological and Economic Analysis Division
U.S. EPA/Office of Pesticide Programs
(703) 308-8136
chism.bill@epa.gov

From: Tindall, Kelly
Sent: Tuesday, September 04, 2018 3:33 PM
To: Kaul, Monisha <Kaul.Monisha@epa.gov>; Cook, Colwell <cook.colwell@epa.gov>; Becker, Jonathan <Becker.Jonathan@epa.gov>; Jones, Arnet <Jones.Arnet@epa.gov>; Chism, William <Chism.Bill@epa.gov>; Berwald, Derek <Berwald.Derek@epa.gov>; Myers, Clayton <Myers.Clayton@epa.gov>; Kiely, Timothy <Kiely.Timothy@epa.gov>; Sims, Diann <Sims.Diann@epa.gov>; Wyatt, TJ <Wyatt.Tj@epa.gov>; Jarboe, Stephen <Jarboe.Steve@epa.gov>; Suarez, Mark <Suarez.Mark@epa.gov>; Gelso, Brett <gelso.brett@epa.gov>; Hawkins, Caleb <Hawkins.Caleb@epa.gov>
Subject: RE: BEAD Coordination on Registration Division Projects

Xtendimax cost: <https://www.reuters.com/article/us-usa-pesticides-monsanto/monsanto-offers-cash-to-u-s-farmers-who-use-controversial-chemical-idUSKBN1E50EN>

Kelly Tindall, Biologist
Biological Analysis Branch
Biological and Economic Analysis Division
Office of Pesticide Programs
US Environmental Protection Agency
703-308-8188

**ALL CONTENTS AND ATTACHMENTS TO THIS EMAIL CORRESPONDENCE ARE TO BE CONSIDERED
DRAFT/INTERNAL/DELIBERATIVE ONLY, NOT TO BE SHARED UNLESS SPECIFICALLY AND EXPLICITLY STATED**

-----Original Appointment-----

From: Kaul, Monisha
Sent: Thursday, August 30, 2018 8:13 AM
To: Kaul, Monisha; Tindall, Kelly; Cook, Colwell; Becker, Jonathan; Jones, Arnet; Chism, William; Berwald, Derek; Myers, Clayton; Kiely, Timothy; Sims, Diann; Wyatt, TJ; Jarboe, Stephen; Suarez, Mark; Gelso, Brett
Subject: BEAD Coordination on Registration Division Projects
When: Tuesday, September 04, 2018 3:00 PM-3:30 PM (UTC-05:00) Eastern Time (US & Canada).
Where: DCRoomPYS9771/Potomac-Yard-One

Message

From: Chism, William [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=475879B16C29401A9449DDB69D5F7EB1-WILLIAM CHISM]
Sent: 9/12/2018 11:00:17 AM
To: Chism, William [Chism.Bill@epa.gov]
Subject: Xtendimax TUG
Attachments: 2017_tug.010617final.pdf; ATT00001.txt

https://monsanto.com/app/uploads/2017/05/2017_tug.010617final.pdf

Message

From: Peck, Charles [Peck.Charles@epa.gov]
Sent: 9/10/2018 12:57:19 PM
To: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Baris, Reuben [Baris.Reuben@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Ed,

So with regards to question 1, it appears that the majority of the studies potentially experienced an inversion the nights after application. Below is the conditions for the analyses I did. Let me know if you have any questions.

Used met file for flux analysis and looked when both of the following conditions were met

1. Temperatures at 1.5 m > temperatures at 0.33 m
2. Wind speed at 1.5 m was less than 1.34 m/s (3 mph)

Analysis only looked at first three nights after application.

MRID	Year	Study reference	Formulation	Potential Inversion?
49888501	2015	GA bare soil	Xtendimax	Yes, first night 1 am to 7 am, next two nights 8 pm to 7 am
49888503	2015	TX cotton	Xtendimax	Yes, first night 11 pm to 7 am, second night midnight to 7 am, third night midnight to 6:30 am
49888401	2015	GA bare soil	Clarity	Yes, first night 1 am to 7:30 am, second night 7 pm to 9 am, third night 8 pm to 8 am
49888403	2015	TX cotton	Clarity	Yes, first 3 nights, midnight to 6:30 am
50578902	2016	TX bare soil	Xtendimax+Roundup	Yes, first 3 nights, 11 pm to 7 am
50578902	2016	TX cotton	Xtendimax+Roundup	Yes, first 2 nights, midnight to 7 am
50606801	2017	Australia	Xtendimax+Roundup	No

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 3:44 PM
To: Peck, Charles
Cc: Echeverria, Marietta ; Baris, Reuben ; Corbin, Mark
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

See in red.

From: Peck, Charles
Sent: Friday, September 07, 2018 3:36 PM
To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Ed,

1.

2.

Ex. 5 Deliberative Process (DP)

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Odenkirchen, Edward

Sent: Friday, September 07, 2018 3:15 PM

To: Peck, Charles <Peck.Charles@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>

Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Chuck, you that man..now two issue and two questions

1.

2.

Ex. 5 Deliberative Process (DP)

From: Peck, Charles

Sent: Friday, September 07, 2018 3:05 PM

To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>

Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Draft Internal Deliberative, Do Not Quote or Cite

Here is an email I sent to Brian a while back on my take of their position paper.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Peck, Charles

Sent: Tuesday, August 07, 2018 4:04 PM

To: Anderson, Brian <Anderson.Brian@epa.gov>

Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian,

So looking at this document,

Ex. 5 Deliberative Process (DP)

1.

2.

3.

Ex. 5 Deliberative Process (DP)

4.

5.

6.

7.

Ex. 5 Deliberative Process (DP)

Let me know if you have any questions.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Anderson, Brian
Sent: Tuesday, August 07, 2018 2:02 PM
To: Peck, Charles <Peck.Charles@epa.gov>
Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Can you do a quick read of this? Would be good to know if this has validity or has some insight?

From: Hathaway, Margaret
Sent: Tuesday, August 07, 2018 2:00 PM
To: Anderson, Brian <Anderson.Brian@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>
Subject: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian:

Thanks very much for this summary of EFED's conclusions thus far. On a related note, Monsanto emailed Reuben today with a copy of a position paper (attached) entitled "THE SCIENTIFIC BASIS FOR UNDERSTANDING THE OFF-TARGET MOVEMENT POTENTIAL OF XTENDIMAX" in support of the continued registration of XtendiMax Herbicide for use on dicamba-tolerant soybeans and cotton.

RD is still deciding whether or not this needs to be formally beaned, but I think it would be good for EFED to at least have a courtesy copy. I'm still reading the document, but noted that Monsanto states that "there is no material difference in the volatility characteristics of XtendiMax across a wide range of soil types and pH levels, geographies, and temperatures, rebutting any hypotheses that such variations may cause volatility in quantities that will impact plant height outside of the treated field."

- Meg

From: Anderson, Brian
Sent: Tuesday, August 07, 2018 8:18 AM
To: Baris, Reuben <Baris.Reuben@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>
Subject: Dicamba volatility

Hi RD Dicamba Team,

Chuck put together a summary of the two new volatility studies. The results are graphed at the end overlayed with the results of the previously submitted data. **Ex. 5 Deliberative Process (DP)**
due to somewhat higher temperatures. Soil pH was also measured without a clear association with volatility.

In addition to these field volatility studies, we also have some data from humidome studies that were emailed to us from Tom Mueller - we don't think these data can really be used/or released because it's pre-publication. He's trying to get it published now. **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

So basically, the story so far is that:

1. Dicamba is semi-volatile. New formulations were submitted over the last several years for over the top use to cotton and soybean that claimed decreased volatility.
2. EFED's initial risk assessment evaluated volatility based on available field volatility studies for the new formulations. The modeling suggested that volatility is not expected to result in effects to non-target plants off the field.

3.

4.

Ex. 5 Deliberative Process (DP)

5. Pre-publication (preliminary Mueller data) data also suggests that dicamba volatilization appears to increase with decreases in the tank mix pH (none of the submitted field studies included tank mix measurements of pH).
6. We are evaluating whether or not the results of the new studies would result in different conclusions with regard to non-target plant effects from volatility.

Thanks

Brian

Brian Anderson
Office of Pesticide Programs
Environmental Fate and Effects Division
703.305.0067

Message

From: Wait, Monica [Wait.Monica@epa.gov]
Sent: 10/18/2018 8:05:24 PM
To: Corbin, Mark [Corbin.Mark@epa.gov]; Peck, Charles [Peck.Charles@epa.gov]
CC: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]; Farruggia, Frank [Farruggia.Frank@epa.gov]; Wagman, Michael [Wagman.Michael@epa.gov]
Subject: RE: dicamba DERs log out prep
Attachments: 128931+_DP448078+_DER-Memo_10-18-18 Draft.docx

Hi Mark,

Here is the latest revised and cleaned up version of the dicamba DER log out cover memo.

Thanks,
Monica

From: Corbin, Mark
Sent: Thursday, October 18, 2018 3:46 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>; Wagman, Michael <Wagman.Michael@epa.gov>
Subject: RE: dicamba DERs log out prep

Looks good. If we don't have the MRID in place for Growe can we add it and just note for Marietta we are still waiting on that from ITRMD?

I'd like to clean this up and get it to her cob today if possible

mark

From: Peck, Charles
Sent: Thursday, October 18, 2018 3:29 PM
To: Wait, Monica <Wait.Monica@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>; Wagman, Michael <Wagman.Michael@epa.gov>
Subject: RE: dicamba DERs log out prep

Sorry folks, see attached

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Wait, Monica
Sent: Thursday, October 18, 2018 3:16 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>; Wagman,

Michael <Wagman.Michael@epa.gov>

Subject: RE: dicamba DERs log out prep

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Thanks,
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Subject: RE: dicamba DERs log out prep

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We need to get an MRID for Growe, 2017 (attached) as we've included it in the effects paper.

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Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>; Wagman, Michael <Wagman.Michael@epa.gov>

Subject: RE: dicamba DERs log out prep

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Chuck – there are a couple embedded questions / comments for you.

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Thanks

Cc'ing Monica. Monica let's think about the best way to ensure when we send the memo documenting all the studies with reviews that we capture these. Whether that is in the memo itself or the email to her are the options I can envision

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Cc: Corbin, Mark <Corbin.Mark@epa.gov>; Lowit, Michael <Lowit.Michael@epa.gov>

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Subject: RE: dicamba DER log out memo shell

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Subject: dicamba DER log out memo shell

Hello,

Attached is a shell for the DER / open literature reviews to be logged out (presumably late this week or early next). There are a few holes for study citations and classifications for you all to fill in.

Also, please double check the list of open literature articles to make sure I didn't inadvertently miss anything.

Thanks,
Monica

Message

From: Farruggia, Frank [Farruggia.Frank@epa.gov]
Sent: 9/10/2018 12:43:20 PM
To: Peck, Charles [Peck.Charles@epa.gov]; Wait, Monica [Wait.Monica@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Baris, Reuben [Baris.Reuben@epa.gov]; Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]
Subject: RE: Review of Monsanto Position Paper, Draft Internal Deliberative, Do Not Quote or Cite

Thanks Monica

Frank T. Farruggia, Ph.D.
Environmental Fate & Effects Division
Office of Pesticide Programs, US-EPA
1200 Pennsylvania Avenue, N.W., Washington, DC 20460
Mail Code: 7507P
Phone: (703)347-0231

From: Peck, Charles
Sent: Monday, September 10, 2018 7:17 AM
To: Wait, Monica ; Corbin, Mark ; Echeverria, Marietta ; Baris, Reuben ; Odenkirchen, Edward
Cc: Farruggia, Frank
Subject: RE: Review of Monsanto Position Paper, Draft Internal Deliberative, Do Not Quote or Cite

Thanks Monica!

From: Wait, Monica
Sent: Monday, September 10, 2018 7:13 AM
To: Peck, Charles <Peck.Charles@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Cc: Farruggia, Frank <Farruggia.Frank@epa.gov>
Subject: RE: Review of Monsanto Position Paper, Draft Internal Deliberative, Do Not Quote or Cite

Thanks Chuck. I just uploaded it to OneDrive, and you all should have received a link for review / editing.

Monica

From: Peck, Charles
Sent: Monday, September 10, 2018 6:53 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Cc: Wait, Monica <Wait.Monica@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>
Subject: Review of Monsanto Position Paper, Draft Internal Deliberative, Do Not Quote or Cite

Attached is my draft review of the Monsanto whitepaper.

Monica - could you please upload this to the Sharepoint site so folks may comment? Thanks!

Chuck Peck
OPP/EFED/ERB VI

Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Corbin, Mark
Sent: Friday, September 07, 2018 3:11 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Looks pretty thorough. Probably want to get that into Word form and we can figure out where it fits later. We might need a little narrative around it but looks like that won't be much work

mark

From: Peck, Charles
Sent: Friday, September 07, 2018 3:05 PM
To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Draft Internal Deliberative, Do Not Quote or Cite

Here is an email I sent to Brian a while back on my take of their position paper.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Peck, Charles
Sent: Tuesday, August 07, 2018 4:04 PM
To: Anderson, Brian <Anderson.Brian@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian,

So looking at this document,

Ex. 5 Deliberative Process (DP)

1.

Ex. 5 Deliberative Process (DP)

2.

Ex. 5 Deliberative Process (DP)

Let me know if you have any questions.

Chuck Peck
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Potomac Yard South
Crystal City, VA
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peck.charles@epa.gov

From: Anderson, Brian
Sent: Tuesday, August 07, 2018 2:02 PM
To: Peck, Charles <Peck.Charles@epa.gov>
Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Can you do a quick read of this? Would be good to know if this has validity or has some insight?

From: Hathaway, Margaret
Sent: Tuesday, August 07, 2018 2:00 PM
To: Anderson, Brian <Anderson.Brian@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>
Subject: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian:

Thanks very much for this summary of EFED's conclusions thus far. On a related note, Monsanto emailed Reuben today with a copy of a position paper (attached) entitled "THE SCIENTIFIC BASIS FOR UNDERSTANDING THE OFF-TARGET

MOVEMENT POTENTIAL OF XTENDIMAX" in support of the continued registration of XtendiMax Herbicide for use on dicamba-tolerant soybeans and cotton.

RD is still deciding whether or not this needs to be formally beaned, but I think it would be good for EFED to at least have a courtesy copy. I'm still reading the document, but noted that Monsanto states that "there is no material difference in the volatility characteristics of XtendiMax across a wide range of soil types and pH levels, geographies, and temperatures, rebutting any hypotheses that such variations may cause volatility in quantities that will impact plant height outside of the treated field."

- Meg

From: Anderson, Brian

Sent: Tuesday, August 07, 2018 8:18 AM

To: Baris, Reuben <Baris.Reuben@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>

Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>

Subject: Dicamba volatility

Hi RD Dicamba Team,

Chuck put together a summary of the two new volatility studies. The results are graphed at the end overlaved with the results of the previously submitted data.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

In addition to these field volatility studies, we also have some data from humidome studies that were emailed to us from Tom Mueller - we don't think these data can really be used/or released because it's pre-publication. He's trying to get it published now.

Ex. 5 Deliberative Process (DP)

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So basically, the story so far is that:

1. Dicamba is semi-volatile. New formulations were submitted over the last several years for over the top use to cotton and soybean that claimed decreased volatility.
2. EFED's initial risk assessment evaluated volatility based on available field volatility studies for the new formulations. The modeling suggested that volatility is not expected to result in effects to non-target plants off the field.

3.

4.

Ex. 5 Deliberative Process (DP)

5. Pre-publication (preliminary Mueller data) data also suggests that dicamba volatilization appears to increase with decreases in the tank mix pH (none of the submitted field studies included tank mix measurements of pH).
6. We are evaluating whether or not the results of the new studies would result in different conclusions with regard to non-target plant effects from volatility.

Thanks

Brian

Brian Anderson
Office of Pesticide Programs
Environmental Fate and Effects Division
703.305.0067

Message

From: Peck, Charles [Peck.Charles@epa.gov]
Sent: 10/18/2018 7:29:09 PM
To: Wait, Monica [Wait.Monica@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]
CC: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]; Farruggia, Frank [Farruggia.Frank@epa.gov]; Wagman, Michael [Wagman.Michael@epa.gov]
Subject: RE: dicamba DERs log out prep
Attachments: 128931+_DP448078+_DER-Memo_10-18-18 Draft cap.docx

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CC: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]; Farruggia, Frank [Farruggia.Frank@epa.gov]; Wagman, Michael [Wagman.Michael@epa.gov]
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Subject: RE: dicamba DERs log out prep

Thanks

Cc'ing Monica. Monica let's think about the best way to ensure when we send the memo documenting all the studies with reviews that we capture these. Whether that is in the memo itself or the email to her are the options I can envision

mark

From: Peck, Charles
Sent: Thursday, October 18, 2018 12:46 PM

To: Corbin, Mark <Corbin.Mark@epa.gov>

Subject: RE: dicamba DERs log out prep

Mark,

In addition to the studies listed in the DER memo, we've also reviewed a number of 2018 large scale field studies evaluating visual plant injury and plant height reductions from Xtendimax applications for the following:

- AR (Dr. Norsworthy)
- IN (Dr. Young)
- WI (Dr. Werle)
- MI (Dr. Sprague)

We also have the small scale field studies that we evaluated for visual plant damage and plant height reductions (AR only) from Xtendimax and Engenia applications for AR (Dr. Norsworthy), NE (Dr. Kruger), MO (Dr. Bradley), IN (Dr. Young), and TN (Dr. Steckel). We also evaluated a small scale field study for visual damage from Engenia applications (IN, Dr. Young).

Lastly, we reviewed the volatility data classified as CBI from Dupont in response to an information request. Because of the CBI nature, we've developed a DER for it, but have not included it in the effects document.

All of these studies were spreadsheet and slide presentation materials, none were actual journal articles or papers. We could develop formal DERs for them once they've been published or we receive formal submissions.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Wait, Monica

Sent: Wednesday, October 17, 2018 3:41 PM

To: Wagman, Michael <Wagman.Michael@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>

Cc: Corbin, Mark <Corbin.Mark@epa.gov>; Lowit, Michael <Lowit.Michael@epa.gov>

Subject: dicamba DERs log out prep

Hello,

In anticipation of the upcoming dicamba decision, I wanted to circle back on the status of the open lit and registrant study DERs. The attached cover memo contains the list of DERs currently on my radar with some comments added by Michael Lowit. I'm wondering if there are any more recent articles / studies that have unique DERs that we need to add to this list to be logged out.

Chuck – would we add the AZ field volatility study DER to this list (MRID 506428010)?

Are there any additional eco studies / articles we've reviewed with DERs?

Have the individual DERs been finalized, PDFed, and signed yet? If not do we need to coordinate and set a timeline for that? Anyone need help with file naming?

Thanks,
Monica

From: Lowit, Michael
Sent: Monday, September 17, 2018 4:31 PM
To: Wait, Monica <Wait.Monica@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>
Subject: RE: dicamba DER log out memo shell

I added what I could as of today. If I am remembering the procedures correctly, we would not need MRIDs for these open lit studies since they will not be used quantitatively in the risk assessment, is that correct?

From: Wait, Monica
Sent: Monday, September 17, 2018 12:16 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Lowit, Michael <Lowit.Michael@epa.gov>; Farruggia, Frank <Farruggia.Frank@epa.gov>
Subject: dicamba DER log out memo shell

Hello,

Attached is a shell for the DER / open literature reviews to be logged out (presumably late this week or early next). There are a few holes for study citations and classifications for you all to fill in.

Also, please double check the list of open literature articles to make sure I didn't inadvertently miss anything.

Thanks,
Monica

Message

From: Peck, Charles [Peck.Charles@epa.gov]
Sent: 9/10/2018 10:53:01 AM
To: Corbin, Mark [Corbin.Mark@epa.gov]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Baris, Reuben [Baris.Reuben@epa.gov]; Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]
CC: Wait, Monica [Wait.Monica@epa.gov]; Farruggia, Frank [Farruggia.Frank@epa.gov]
Subject: Review of Monsanto Position Paper, Draft Internal Deliberative, Do Not Quote or Cite
Attachments: 128931_DPXXXXXX_RTC_9-10-2018.docx

Attached is my draft review of the Monsanto whitepaper.

Monica - could you please upload this to the Sharepoint site so folks may comment? Thanks!

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Corbin, Mark
Sent: Friday, September 07, 2018 3:11 PM
To: Peck, Charles ; Echeverria, Marietta ; Baris, Reuben ; Odenkirchen, Edward
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Looks pretty thorough. Probably want to get that into Word form and we can figure out where it fits later. We might need a little narrative around it but looks like that won't be much work

mark

From: Peck, Charles
Sent: Friday, September 07, 2018 3:05 PM
To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Draft Internal Deliberative, Do Not Quote or Cite

Here is an email I sent to Brian a while back on my take of their position paper.

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From: Peck, Charles
Sent: Tuesday, August 07, 2018 4:04 PM

To: Anderson, Brian <Anderson.Brian@epa.gov>

Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian,

So looking at this document:

Ex. 5 Deliberative Process (DP)

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- 2.
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- 7.

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From: Anderson, Brian

Sent: Tuesday, August 07, 2018 2:02 PM

To: Peck, Charles <Peck.Charles@epa.gov>

Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Can you do a quick read of this? Would be good to know if this has validity or has some insight?

From: Hathaway, Margaret

Sent: Tuesday, August 07, 2018 2:00 PM

To: Anderson, Brian <Anderson.Brian@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>

Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>

Subject: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian:

Thanks very much for this summary of EFED's conclusions thus far. On a related note, Monsanto emailed Reuben today with a copy of a position paper (attached) entitled "THE SCIENTIFIC BASIS FOR UNDERSTANDING THE OFF-TARGET MOVEMENT POTENTIAL OF XTENDIMAX" in support of the continued registration of XtendiMax Herbicide for use on dicamba-tolerant soybeans and cotton.

RD is still deciding whether or not this needs to be formally beamed, but I think it would be good for EFED to at least have a courtesy copy. I'm still reading the document, but noted that Monsanto states that "there is no material difference in the volatility characteristics of XtendiMax across a wide range of soil types and pH levels, geographies, and temperatures, rebutting any hypotheses that such variations may cause volatility in quantities that will impact plant height outside of the treated field."

- Meg

From: Anderson, Brian

Sent: Tuesday, August 07, 2018 8:18 AM

To: Baris, Reuben <Baris.Reuben@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>

Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>

Subject: Dicamba volatility

Hi RD Dicamba Team,

Chuck put together a summary of the two new volatility studies. The results are graphed at the end overlaid with the results of the previously submitted data.

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In addition to these field volatility studies, we also have some data from humidome studies that were emailed to us from Tom Mueller - we don't think these data can really be used/or released because it's pre-publication. He's trying to get it published now.

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2. EFED's initial risk assessment evaluated volatility based on available field volatility studies for the new formulations. The modeling suggested that volatility is not expected to result in effects to non-target plants off the field.

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6. We are evaluating whether or not the results of the new studies would result in different conclusions with regard to non-target plant effects from volatility.

Thanks

Brian

Brian Anderson
Office of Pesticide Programs
Environmental Fate and Effects Division
703.305.0067

Message

From: Echeverria, Marietta [Echeverria.Marietta@epa.gov]
Sent: 9/8/2018 12:43:05 AM
To: Corbin, Mark [Corbin.Mark@epa.gov]
Subject: Re: FYI Monsanto Position Paper - RE: Dicamba volatility

Please schedule

Sent from my iPhone

On Sep 7, 2018, at 8:29 PM, Corbin, Mark <Corbin.Mark@epa.gov> wrote:

I can do either one.

Sent from my iPhone

On Sep 7, 2018, at 4:45 PM, Echeverria, Marietta <Echeverria.Marietta@epa.gov> wrote:

Mark, Can we meet at 10 or 11 on Monday to discuss strategy for discussions with registrants? We will be talking to BASF at 1 pm on Monday and with Bayer on Tuesday (not yet scheduled). Reuben if you are scheduling the Bayer meeting on Tuesday, I can't be there until after 3 pm, if possible.

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 3:44 PM
To: Peck, Charles <Peck.Charles@epa.gov>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility
See in red.

From: Peck, Charles
Sent: Friday, September 07, 2018 3:36 PM
To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
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Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

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been reported in the past 2-3 weeks.

Let me know if you have any questions.

Chuck Peck

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From: Hathaway, Margaret

Sent: Tuesday, August 07, 2018 2:00 PM

To: Anderson, Brian <Anderson.Brian@epa.gov>; Baris, Reuben

<Baris.Reuben@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>

Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>;

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- Meg

From: Anderson, Brian

Sent: Tuesday, August 07, 2018 8:18 AM

To: Baris, Reuben <Baris.Reuben@epa.gov>; Hathaway, Margaret

<Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>

Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>;

Wait, Monica <Wait.Monica@epa.gov>

Subject: Dicamba volatility

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Thanks

Brian

Brian Anderson

Office of Pesticide Programs

Environmental Fate and Effects Division

703.305.0067

Message

From: Peck, Charles [Peck.Charles@epa.gov]
Sent: 9/7/2018 7:48:47 PM
To: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]
CC: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Baris, Reuben [Baris.Reuben@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

I'll look at the field volatility studies and see if any were done when an inversion may have occurred.

It should also be noted that the flux rates are assumed to be the highest we would expect to see, so that, when running AERMOD or PERFUM, the results would also be conservative. AERMOD and PERFUM do not adjust flux rates based on temperature or relative humidity. The flux rates are static.

Chuck Peck
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From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 3:44 PM
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To: Anderson, Brian <Anderson.Brian@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>
Subject: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian:

Thanks very much for this summary of EFED's conclusions thus far. On a related note, Monsanto emailed Reuben today with a copy of a position paper (attached) entitled "THE SCIENTIFIC BASIS FOR UNDERSTANDING THE OFF-TARGET MOVEMENT POTENTIAL OF XTENDIMAX" in support of the continued registration of XtendiMax Herbicide for use on dicamba-tolerant soybeans and cotton.

RD is still deciding whether or not this needs to be formally beamed, but I think it would be good for EFED to at least have a courtesy copy. I'm still reading the document, but noted that Monsanto states that "there is no material difference in the volatility characteristics of XtendiMax across a wide range of soil types and pH levels, geographies, and temperatures, rebutting any hypotheses that such variations may cause volatility in quantities that will impact plant height outside of the treated field."

- Meg

From: Anderson, Brian
Sent: Tuesday, August 07, 2018 8:18 AM
To: Baris, Reuben <Baris.Reuben@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica

<Wait.Monica@epa.gov>
Subject: Dicamba volatility

Hi RD Dicamba Team,

Chuck put together a summary of the two new volatility studies. The results are graphed at the end overlaid with the results of the previously submitted data.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

In addition to these field volatility studies, we also have some data from humidome studies that were emailed to us from Tom Mueller - we don't think these data can really be used/or released because it's pre-publication. He's trying to get it published now.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

So basically, the

story so far is that:

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

Ex. 5 Deliberative Process (DP)

Thanks

Brian

Brian Anderson
Office of Pesticide Programs
Environmental Fate and Effects Division
703.305.0067

From: Echeverria, Marietta [Echeverria.Marietta@epa.gov]
Sent: 9/7/2018 7:35:13 PM
To: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]; Peck, Charles [Peck.Charles@epa.gov]; Baris, Reuben [Baris.Reuben@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Yes, I think we start on why we think the other data and analyses are limited and the uncertainties

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 3:31 PM
To: Echeverria, Marietta ; Peck, Charles ; Baris, Reuben ; Corbin, Mark
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

So we talk about

Ex. 5 Deliberative Process (DP)

From: Echeverria, Marietta
Sent: Friday, September 07, 2018 3:20 PM
To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

For next week's discussion they are interested in the impact of ESA - i.e., the size of the buffer and the geographic scope.

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 3:15 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Chuck, you that man..now two issue and two questions

- 1.
- 2.

Ex. 5 Deliberative Process (DP)

From: Peck, Charles

Sent: Friday, September 07, 2018 3:05 PM

To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>

Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Draft Internal Deliberative, Do Not Quote or Cite

Here is an email I sent to Brian a while back on my take of their position paper.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Peck, Charles

Sent: Tuesday, August 07, 2018 4:04 PM

To: Anderson, Brian <Anderson.Brian@epa.gov>

Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian,

So looking at this document,

Ex. 5 Deliberative Process (DP)

1.

2.

3.

Ex. 5 Deliberative Process (DP)

4.

5.

6.

7.

Ex. 5 Deliberative Process (DP)

Let me know if you have any questions.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Anderson, Brian
Sent: Tuesday, August 07, 2018 2:02 PM
To: Peck, Charles <Peck.Charles@epa.gov>
Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Can you do a quick read of this? Would be good to know if this has validity or has some insight?

From: Hathaway, Margaret
Sent: Tuesday, August 07, 2018 2:00 PM
To: Anderson, Brian <Anderson.Brian@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>
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RD is still deciding whether or not this needs to be formally beaned, but I think it would be good for EFED to at least have a courtesy copy. I'm still reading the document, but noted that Monsanto states that "there is no material difference in the volatility characteristics of XtendiMax across a wide range of soil types and pH levels, geographies, and temperatures, rebutting any hypotheses that such variations may cause volatility in quantities that will impact plant height outside of the treated field."

- Meg

From: Anderson, Brian
Sent: Tuesday, August 07, 2018 8:18 AM
To: Baris, Reuben <Baris.Reuben@epa.gov>; Hathaway, Margaret <Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>
Subject: Dicamba volatility

Hi RD Dicamba Team,

Chuck put together a summary of the two new volatility studies. The results are graphed at the end overlaid with the results of the previously submitted data.

Ex. 5 Deliberative Process (DP)

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In addition to these field volatility studies, we also have some data from humidome studies that were emailed to us from Tom Mueller - we don't think these data can really be used/or released because it's pre-publication. He's trying to

Ex. 5 Deliberative Process (DP)

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1. Dicamba is semi-volatile. New formulations were submitted over the last several years for over the top use to cotton and soybean that claimed decreased volatility.
2. EFED's initial risk assessment evaluated volatility based on available field volatility studies for the new formulations. The modeling suggested that volatility is not expected to result in effects to non-target plants off the field.

3.

4.

Ex. 5 Deliberative Process (DP)

5. Pre-publication (preliminary Mueller data) data also suggests that dicamba volatilization appears to increase with decreases in the tank mix pH (none of the submitted field studies included tank mix measurements of pH).
6. We are evaluating whether or not the results of the new studies would result in different conclusions with regard to non-target plant effects from volatility.

Thanks

Brian

Brian Anderson
Office of Pesticide Programs
Environmental Fate and Effects Division
703.305.0067

Message

From: Peck, Charles [Peck.Charles@epa.gov]
Sent: 9/7/2018 7:12:43 PM
To: Corbin, Mark [Corbin.Mark@epa.gov]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Baris, Reuben [Baris.Reuben@epa.gov]; Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility - Internal Draft Deliberative

I can put together a summary of their report and our issues/concerns into a document and have it by Monday for folks to review.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Corbin, Mark
Sent: Friday, September 07, 2018 3:11 PM
To: Peck, Charles ; Echeverria, Marietta ; Baris, Reuben ; Odenkirchen, Edward
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Looks pretty thorough. Probably want to get that into Word form and we can figure out where it fits later. We might need a little narrative around it but looks like that won't be much work

mark

From: Peck, Charles
Sent: Friday, September 07, 2018 3:05 PM
To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
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Ex. 5 Deliberative Process (DP)

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Ex. 5 Deliberative Process (DP)

Let me know if you have any questions.

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Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>; Meadows, Sarah <Meadows.Sarah@epa.gov>
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- Meg

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Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>
Subject: Dicamba volatility

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Ex. 5 Deliberative Process (DP)

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Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

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3. Ex. 5 Deliberative Process (DP)

4.

Ex. 5 Deliberative Process (DP)

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Thanks

Brian

Brian Anderson
Office of Pesticide Programs
Environmental Fate and Effects Division
703.305.0067

Message

From: Peck, Charles [Peck.Charles@epa.gov]
Sent: 9/7/2018 7:01:29 PM
To: Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]
CC: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]; Baris, Reuben [Baris.Reuben@epa.gov]
Subject: RE: dicamba
Attachments: The Scientific Basis for Understanding the Off-Target Movement Potential....pdf

Are you referring to the incident paper you just sent around, or the one attached?

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Echeverria, Marietta
Sent: Friday, September 07, 2018 2:57 PM
To: Corbin, Mark
Cc: Odenkirchen, Edward ; Peck, Charles
Subject: RE: dicamba

We need to have a summary of bayer's white paper and how it comports with our analysis. Can we include a summary by next week?

I'm with Bayer right now.

From: Corbin, Mark
Sent: Friday, September 07, 2018 12:18 PM
To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
Subject: dicamba

Marietta

We have been kicking around some thoughts about the element of the registrant discussions that have been touched on but not really fleshed out well. The idea of whether there could be data generated by registrants to help fill in the gaps of what we know about volatility.

The lingo below is meant more as talking points if we choose to go that route than anything. But Ed, Chuck and I have firmed this up to the point where it probably worth getting it in front of you to think about.

We should, begin formulating a plan to offer up thoughts on how experimentally the registrant can address this controversy or at least provide a substantiating rationale in the form of other lines of evidence. The problem is that without a clear evidence-based exit rationale we really are stuck with the data we currently have, and there appear to be conflicting positions, which could make getting to an agreement that is protective harder.

Ex. 5 Deliberative Process (DP)

Mark Corbin
Branch Chief, Environmental Risk Branch 6
Environmental Fate and Effects Division (7507P)
Office of Pesticide Programs
U.S. Environmental Protection Agency
Washington DC 20460
703-605-0033

Message

From: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]
Sent: 9/7/2018 6:25:50 PM
To: Peck, Charles [Peck.Charles@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]
Subject: RE: DGA and BAPMA internal Deliberative Material

I'm in the document now. I'll add some summation stuff to wrap this issue up. I am working in the document on line so you can see it fished up.

From: Peck, Charles
Sent: Friday, September 07, 2018 2:22 PM
To: Odenkirchen, Edward ; Corbin, Mark
Subject: RE: DGA and BAPMA internal Deliberative Material

Draft Internal Deliberative, Do Not Quote or Cite

Here's the latest version of the memo, with the next flux stuff added. I wasn't sure how to include the dialog we've had about protective vs equivalence. Ed - maybe you can add something where you think it is appropriate, based on the email chain?

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 2:16 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

And is there text yet for me to drop in??? I'm being an impatient butthead ciz I'm supposed to be in that 4:30 meeting today so I want to wrap this issue up if I can before then.

Ex. 5 Deliberative Process (DP)

To illustrate the significance of this point,XXXXXXXXXXXXXXXXXXXX

From: Corbin, Mark
Sent: Friday, September 07, 2018 1:35 PM
To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Maybe you can add some of the language in the email below. Is the Mueller data suggestive of equivalence?

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 1:34 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

☺ chomping at the bit.

From: Corbin, Mark
Sent: Friday, September 07, 2018 1:31 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Maybe v **Ex. 5 Deliberative Process (DP)** . I think Ed is looking for the latest version to drop into the document

From: Peck, Charles
Sent: Friday, September 07, 2018 1:11 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Ex. 5 Deliberative Process (DP)

From: Corbin, Mark
Sent: Friday, September 07, 2018 12:44 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Understood. But protective isn't the same as equivalent right? **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

I think t **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP) ?

If we don't have it we don't have it but the idea was to have something ready if they raise this issue

mark

From: Peck, Charles
Sent: Friday, September 07, 2018 12:25 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Ex. 5 Deliberative Process (DP)

From: Corbin, Mark
Sent: Friday, September 07, 2018 12:09 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Maybe I am confused. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Peck, Charles
Sent: Friday, September 07, 2018 12:06 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

I'm confused. Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Corbin, Mark
Sent: Friday, September 07, 2018 12:02 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Right but to the question before us it suggests Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Peck, Charles
Sent: Friday, September 07, 2018 12:01 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

I guess it's Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Corbin, Mark
Sent: Friday, September 07, 2018 11:52 AM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

I think

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Peck, Charles

Sent: Friday, September 07, 2018 11:46 AM

To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>

Subject: RE: DGA and BAPMA internal Deliberative Material

List works for me.

Attached is the revised write-up addressing Mark's questions. I don't think I can say anything concluding about why the

Ex. 5 Deliberative Process (DP)

Chuck Peck

OPP/EFED/ERB VI

Potomac Yard South

Crystal City, VA

Room 10244

(703) 347-8064

peck.charles@epa.gov

From: Odenkirchen, Edward

Sent: Friday, September 07, 2018 10:54 AM

To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>

Subject: RE: DGA and BAPMA internal Deliberative Material

I agree, talking points ready for when we are challenged.and clearance with RD

I'm happy with it going to Marietta sooner than later, when you and chuck feel it's a good list.

That way Marietta has some luxury of time to wrap her head around it and decide if and when to send it to RD.

From: Corbin, Mark

Sent: Friday, September 07, 2018 10:52 AM

To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>

Subject: RE: DGA and BAPMA internal Deliberative Material

Sure, I can send it to her now if you think it's ready?

I agree it's good to have some thought about this beforehand. It might be as simple as using this as talking points but I suspect we would want to run this by RD first. I don't think the idea of data call in has been discussed beyond the conceptual

From: Odenkirchen, Edward

Sent: Friday, September 07, 2018 10:48 AM

To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>

Subject: RE: DGA and BAPMA internal Deliberative Material

Revised

Mark do you want to send this to Marietta for her consideration in advance of next week's meetings?

Ex. 5 Deliberative Process (DP)

In

From: Corbin, Mark

Sent: Friday, September 07, 2018 9:19 AM

To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>

Subject: RE: DGA and BAPMA internal Deliberative Material

Sounds good. I am thinking just a paragraph that captures these data and any other volatility related line of evidence we have

From: Peck, Charles

Sent: Friday, September 07, 2018 9:17 AM

To: Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>

Subject: RE: DGA and BAPMA internal Deliberative Material

Let me think on it and send you something in a little bit

From: Corbin, Mark

Sent: Friday, September 07, 2018 9:08 AM

To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>

Subject: RE: DGA and BAPMA internal Deliberative Material

Sounds reasonable. Chuck, can you take a first cut and run it by me? Then we can send it to Ed

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 9:02 AM
To: Peck, Charles <Peck.Charles@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Ok, so I just talked with Marietta on this, and she feels its important to **Ex. 5 Deliberative Process (DP)**
Ex. 5 Deliberative Process (DP) So I am envisioning that we use Chuck's comparison of flux as addition text in the existing write up. **Page 7**
Uncertainties and limitations Item 1. We touch on in there but some additional text referring back to the volatile studies and **Ex. 5 Deliberative Process (DP)**, (I note the graph chuck just sent around is already in the document at page 3.)

Chuck can you add something in there, with Mark's help on the wording, to accomplish this?

From: Peck, Charles
Sent: Friday, September 07, 2018 8:54 AM
To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
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correct

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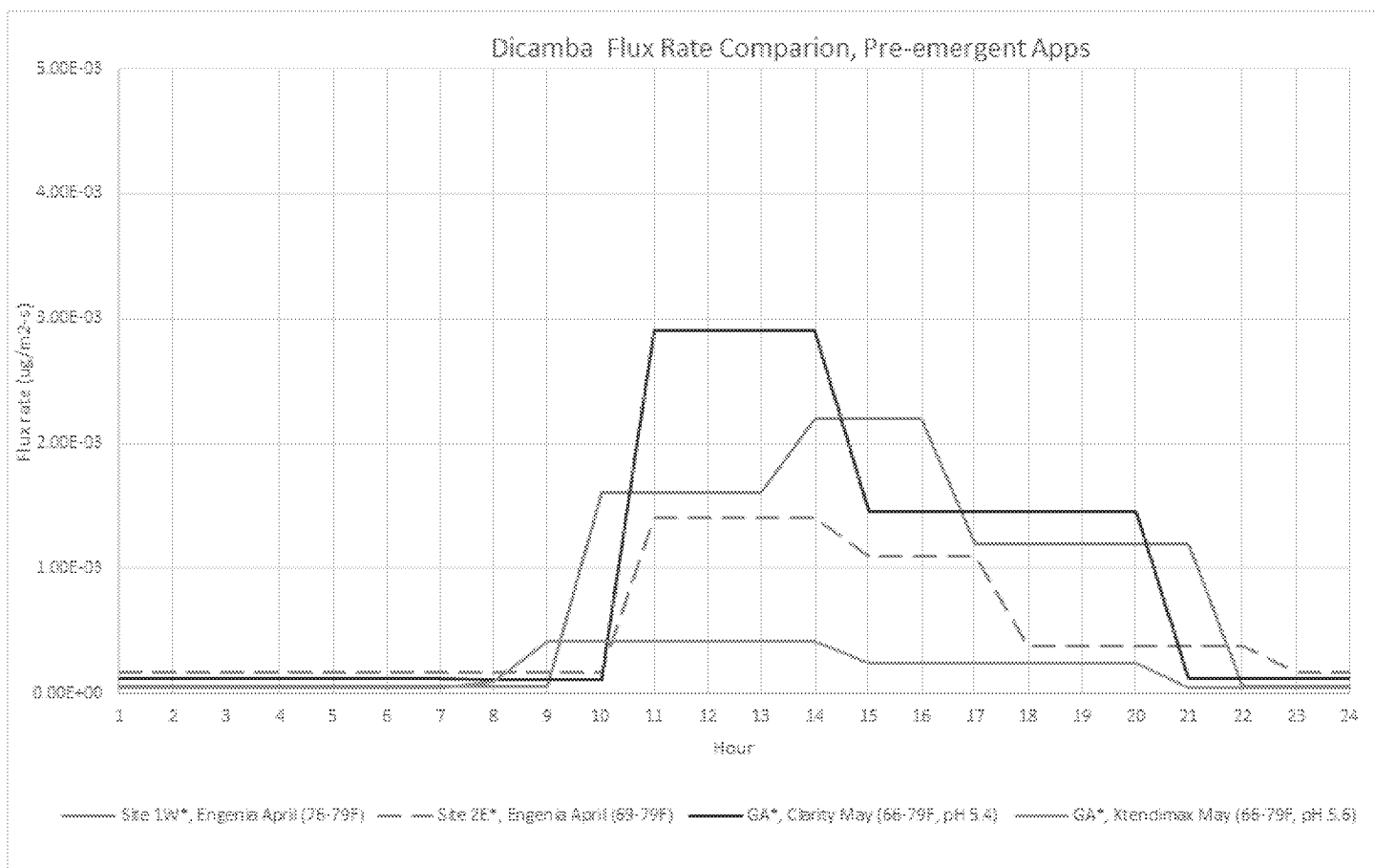
So adding to the key, just so I keep things straight

Clarity - **Ex. 4 CBI**
Engenia
Xtendimax

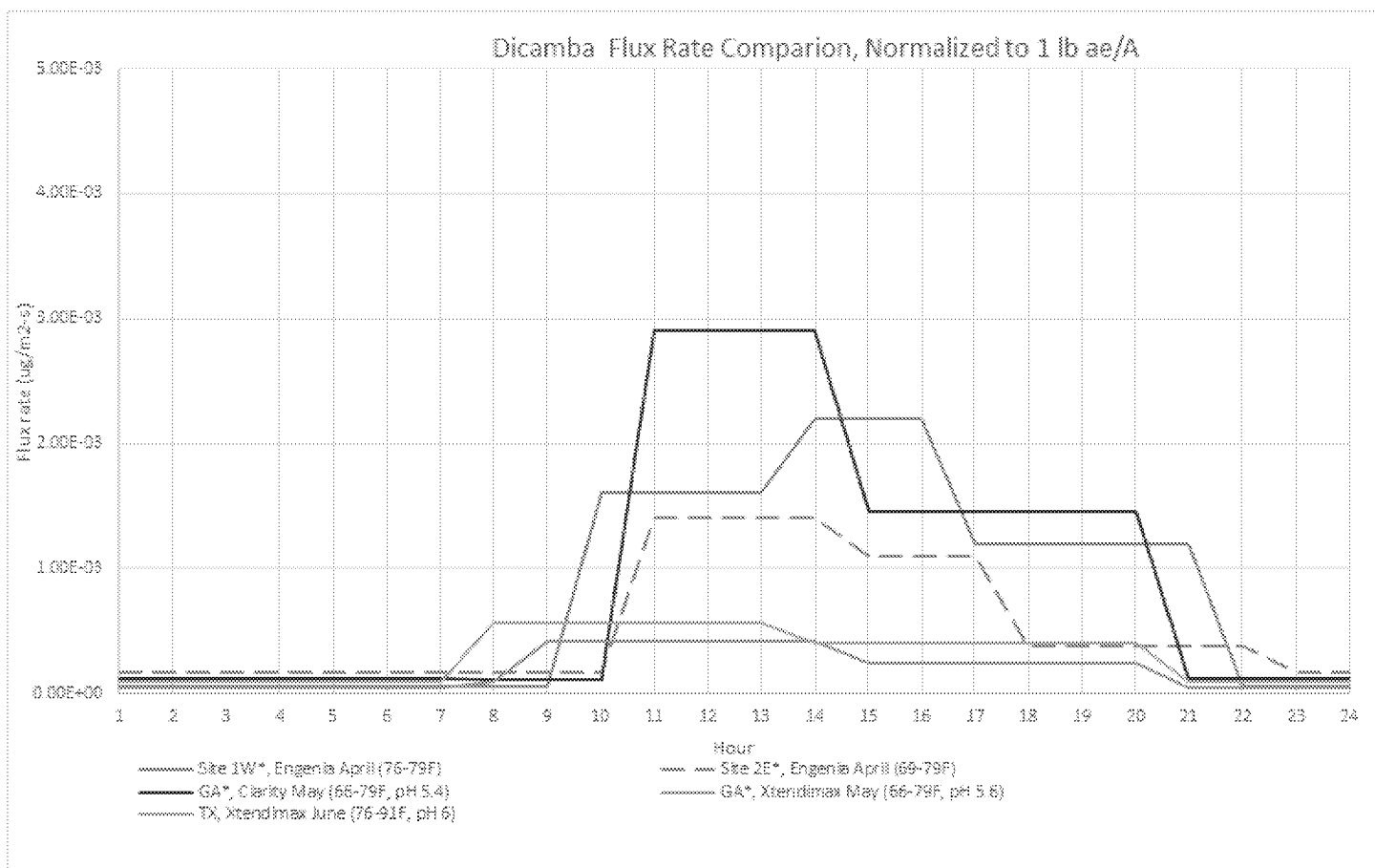
Ex. 4 CBI

From: Peck, Charles
Sent: Friday, September 07, 2018 8:23 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA

So I can remove the studies which have higher temps, and the Xtendimax + glyphosate (see below). It shows the Clarity is higher than Engenia which is higher than Xtendimax.



The only other thing I can do is add the postemergent Xtendimax flux data normalized to 1 lb ae/A (below). This was done at higher temps than the other studies though.



Chuck Peck
 OPP/EFED/ERB VI
 Potomac Yard South
 Crystal City, VA
 Room 10244
 (703) 347-8064
peck.charles@epa.gov

From: Corbin, Mark
Sent: Friday, September 07, 2018 8:07 AM
To: Peck, Charles <Peck.Charles@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA

So it's not a clean as I thought it was.

Ex. 5 Deliberative Process (DP)

So the question is

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

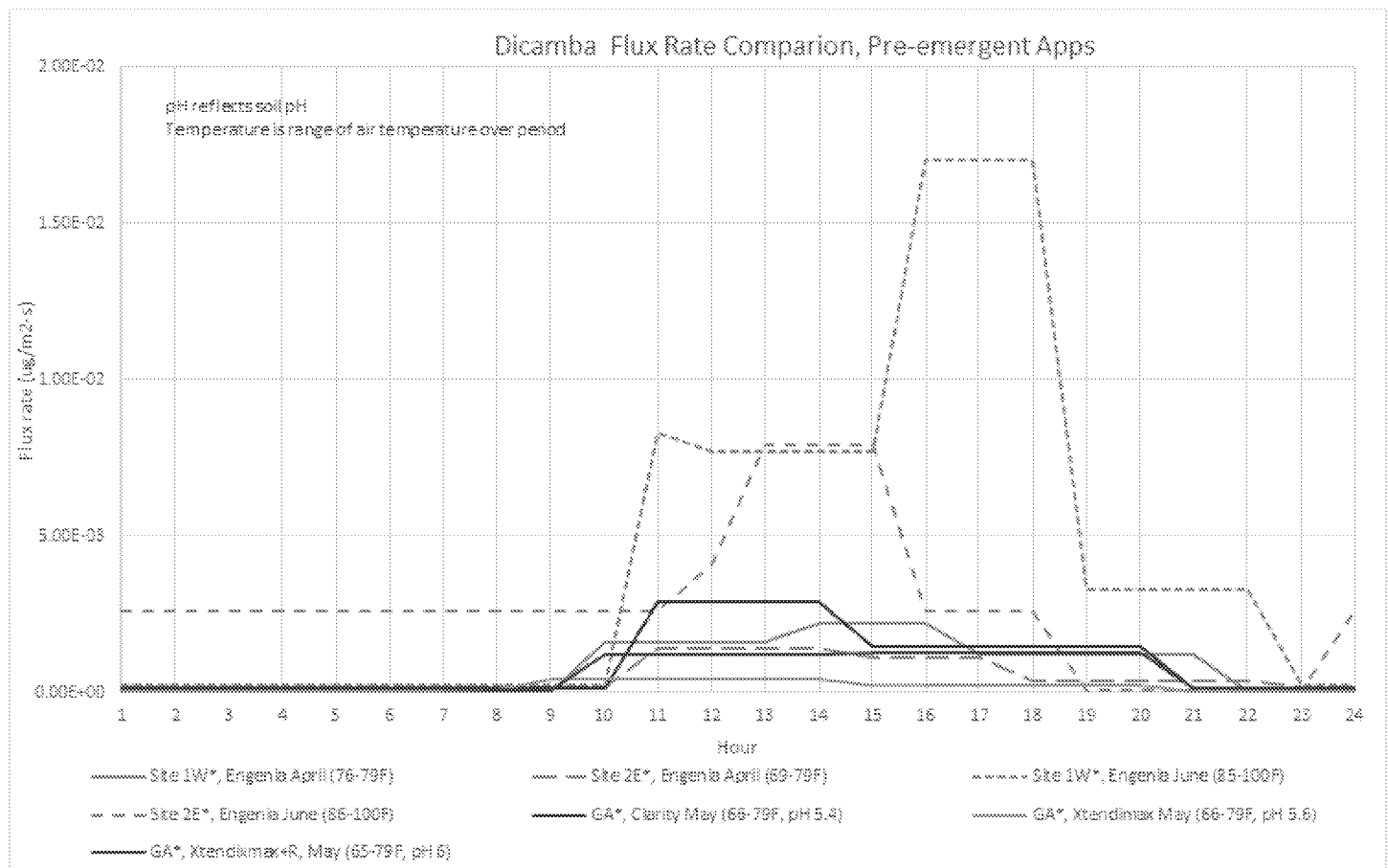
mark

From: Peck, Charles
Sent: Friday, September 07, 2018 8:01 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA

Hi Mark,

Ex. 5 Deliberative Process (DP)

Hope this helps!



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-----Original Message-----
From: Corbin, Mark

Sent: Thursday, September 06, 2018 5:21 PM
To: Peck, Charles <Peck.Charles@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: DGA and BAPMA

Chuck

Not sure if you are working tomorrow but when you can we need a comparison of the flux data for Xtendimax and Engenia.

Since the Jones paper uses Clarity can we say anything about how similar the two GMO products are? If they are similar then it bolsters the Jones paper conclusions for both Engenia and Xtendimax.

Ed, does that sound right?

Thx

Mark

Sent from my iPhone

Message

From: Peck, Charles [Peck.Charles@epa.gov]
Sent: 9/7/2018 6:21:58 PM
To: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]; Corbin, Mark [Corbin.Mark@epa.gov]
Subject: RE: DGA and BAPMA internal Deliberative Material
Attachments: 128931_DPxxxxxx_S3NU-Addendum Internal deliberative Draft Dicamba Issue 9_05_2018.docx

Draft Internal Deliberative, Do Not Quote or Cite

Here's the latest version of the memo, with the next flux stuff added. I wasn't sure how to include the dialog we've had about protective vs equivalence. Ed - maybe you can add something where you think it is appropriate, based on the email chain?

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Potomac Yard South
Crystal City, VA
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(703) 347-8064
peck.charles@epa.gov

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 2:16 PM
To: Corbin, Mark ; Peck, Charles
Subject: RE: DGA and BAPMA internal Deliberative Material

And is there text yet for me to drop in??? I'm being an impatient butthead ciz I'm supposed to be in that 4:30 meeting today.so I want to wrap this issue up if I can before then.

Ex. 5 Deliberative Process (DP)

From: Corbin, Mark
Sent: Friday, September 07, 2018 1:35 PM
To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Maybe you Ex. 5 Deliberative Process (DP)?

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 1:34 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
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☺ chomping at the bit.

From: Corbin, Mark
Sent: Friday, September 07, 2018 1:31 PM
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Ex. 5 Deliberative Process (DP)

From: Corbin, Mark
Sent: Friday, September 07, 2018 12:44 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Understood. **Ex. 5 Deliberative Process (DP)** **Ex. 5 Deliberative Process (DP)**
Ex. 5 Deliberative Process (DP)

I think **Ex. 5 Deliberative Process (DP)**
Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP) **Ex. 5 Deliberative Process (DP)**
Ex. 5 Deliberative Process (DP) /?

If we don't have it we don't have it but the idea was to have something ready if they raise this issue
mark

From: Peck, Charles
Sent: Friday, September 07, 2018 12:25 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Ex. 5 Deliberative Process (DP)

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From: Corbin, Mark
Sent: Friday, September 07, 2018 12:09 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Maybe I am confused.

Ex. 5 Deliberative Process (DP)

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From: Peck, Charles
Sent: Friday, September 07, 2018 12:06 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

I'm confused.

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Corbin, Mark
Sent: Friday, September 07, 2018 12:02 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

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Subject: RE: DGA and BAPMA internal Deliberative Material

I guess

Ex. 5 Deliberative Process (DP)

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I think

Ex. 5 Deliberative Process (DP)

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From: Peck, Charles
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To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

List works for me.

Attached is the revised write-up addressing Mark's questions. I don't think I can say anything concluding about why the

Ex. 5 Deliberative Process (DP)

Chuck Peck
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Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 10:54 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

I agree, talking points ready for when we are challenged.and clearance with RD

I'm happy with it going to Marietta sooner than later, when you and chuck feel it's a good list.

That way Marietta has some luxury of time to wrap her head around it and decide if and when to send it to RD.

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To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
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Sure, I can send it to her now if you think it's ready?

I agree it's good to have some thought about this beforehand. It might be as simple as using this as talking points but I suspect we would want to run this by RD first. I don't think the idea of data call in has been discussed beyond the conceptual

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 10:48 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Revised

Mark do you want to send this to Marietta for her consideration in advance of next week's meetings?

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

From: Corbin, Mark
Sent: Friday, September 07, 2018 9:19 AM
To: Peck, Charles <Peck.Charles@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Sounds good. I am thinking just a paragraph that captures these data and any other volatility related line of evidence we have

From: Peck, Charles
Sent: Friday, September 07, 2018 9:17 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

Let me think on it and send you something in a little bit

From: Corbin, Mark
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Sounds reasonable. Chuck, can you take a first cut and run it by me? Then we can send it to Ed

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Ok, so I just talked with Marietta on this, and she feels its important to

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

So I am envisioning that we use Chuck's comparison of flux as addition text in the existing write up. **Page 7**
Uncertinties and limitations Item 1. We touch on in there but some additional text referring back to the volatile studies

and **Ex. 5 Deliberative Process (DP)**, (I note the graph chunk just sent around is already in the document at page 3.)

Chuck can you add something in there, with Mark's help on the wording, to accomplish this?

From: Peck, Charles
Sent: Friday, September 07, 2018 8:54 AM
To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: DGA and BAPMA internal Deliberative Material

correct

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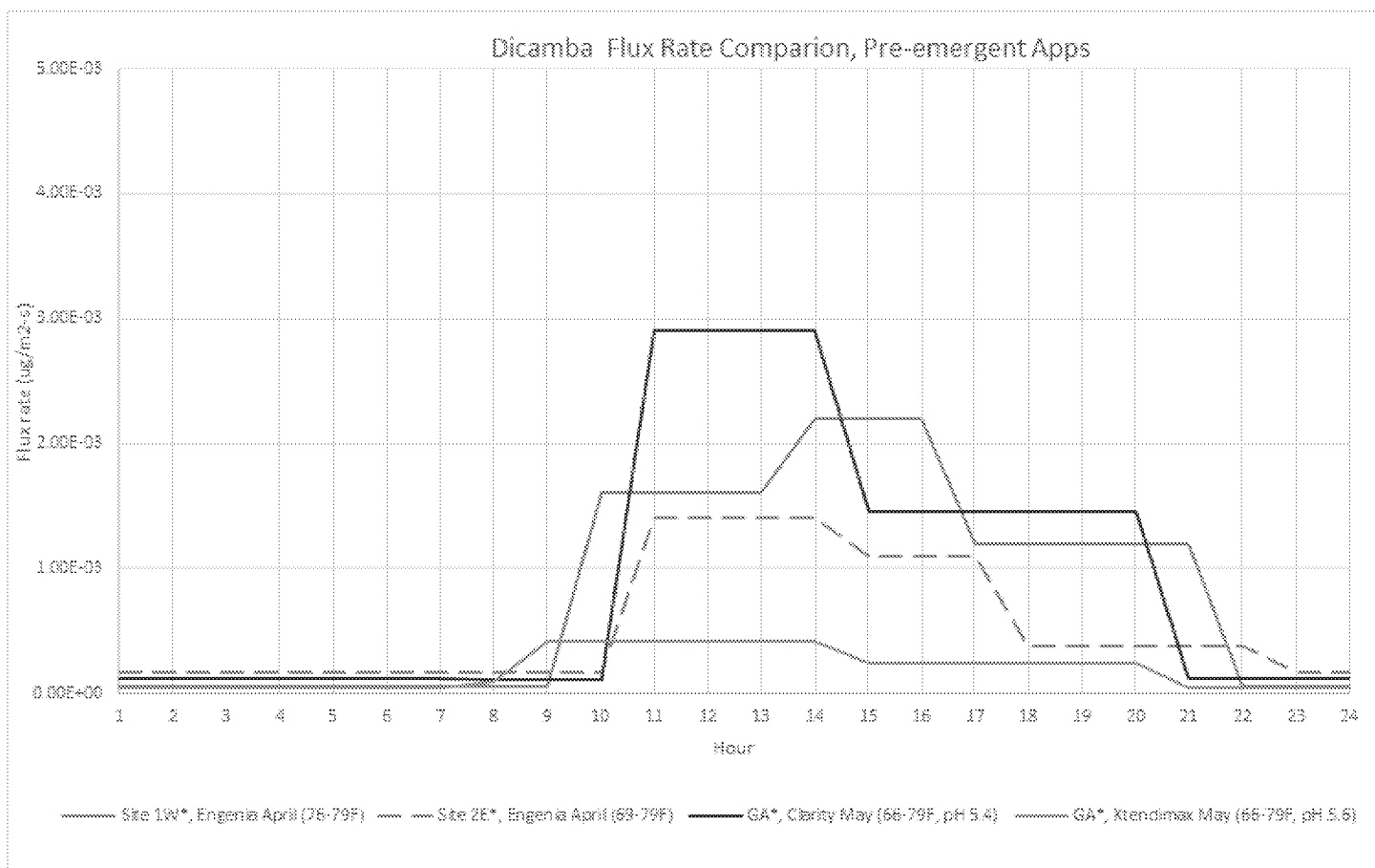
So adding to the key, just so I keep things straight

Clarity
Engenia
Xtending

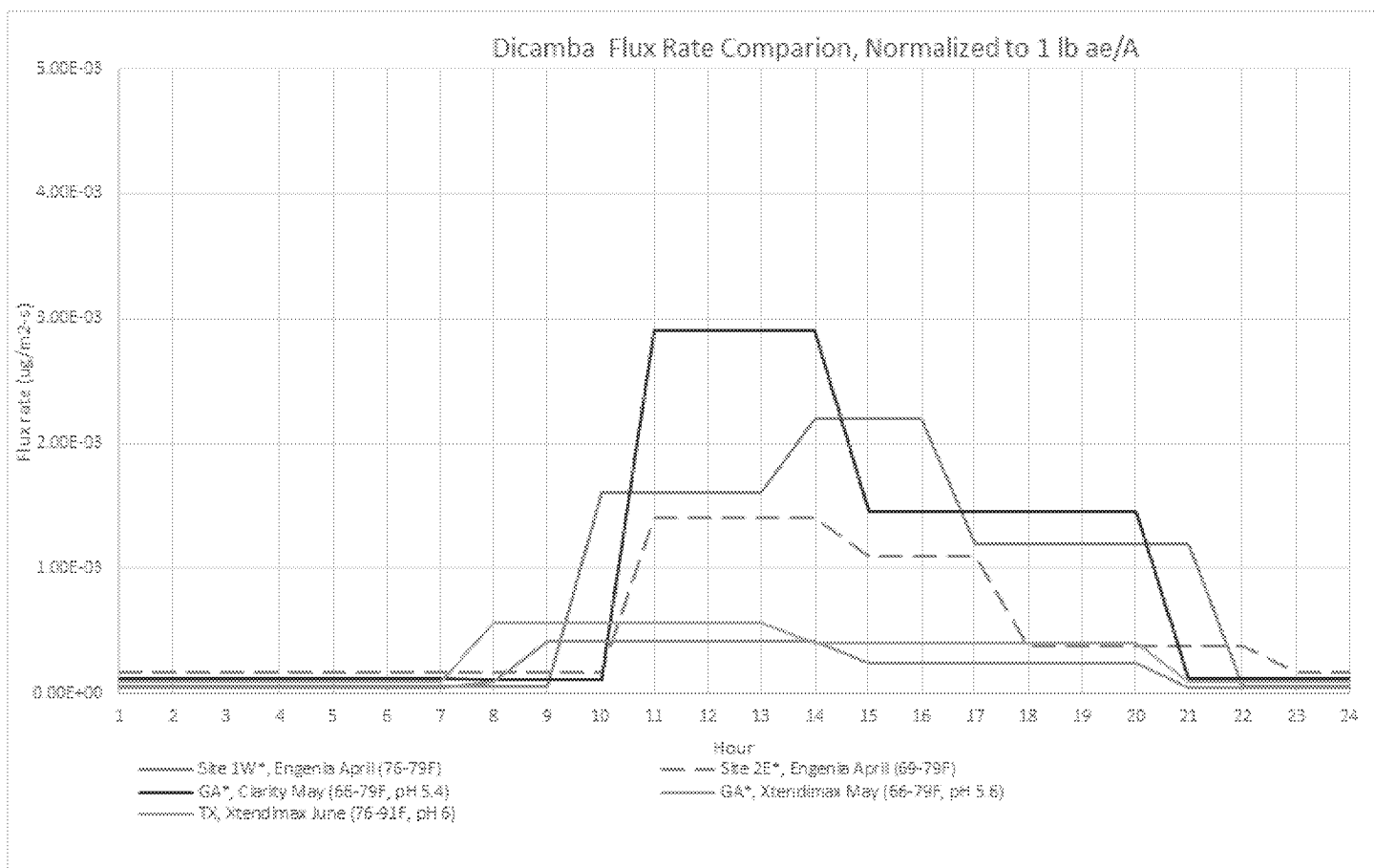
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Ex. 5 Deliberative Process (DP)



The only other thing I can do is add the postemergent Xtendimax flux data normalized to 1 lb ae/A (below). This was done at higher temps than the other studies though.



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So it's not a clean as I thought it was.

Ex. 5 Deliberative Process (DP)

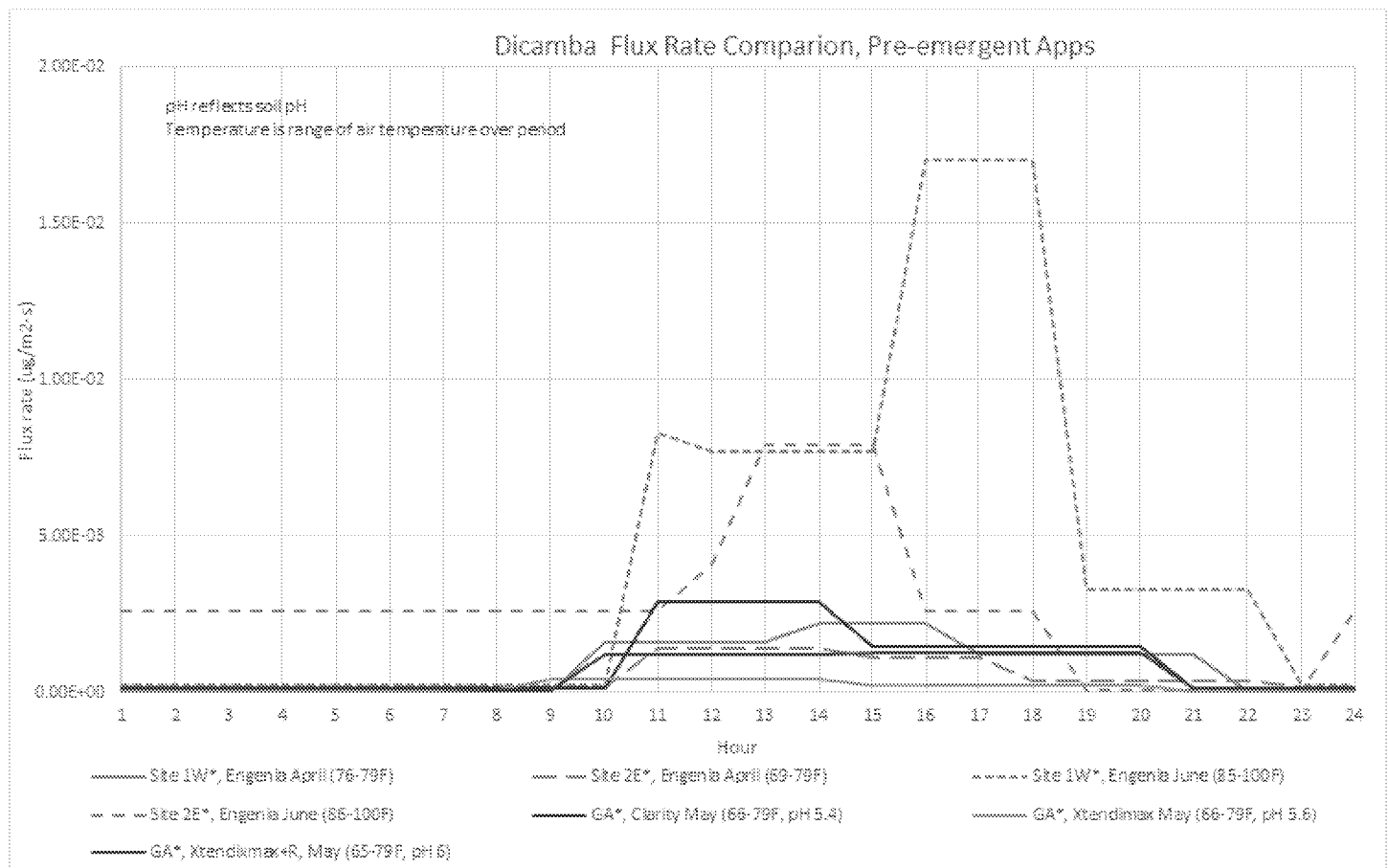
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Hi Mark,

Ex. 5 Deliberative Process (DP)

Hope this helps!



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To: Peck, Charles <Peck.Charles@epa.gov>
Cc: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>
Subject: DGA and BAPMA

Chuck

Not sure

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ed, does that sound right?

Thx

Mark

Sent from my iPhone

Message

From: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]
Sent: 9/7/2018 5:47:39 PM
To: Corbin, Mark [Corbin.Mark@epa.gov]; Peck, Charles [Peck.Charles@epa.gov]
Subject: RE: DGA and BAPMA internal Deliberative Material

In the document right now it states..

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To: Odenkirchen, Edward ; Peck, Charles
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Maybe you can add some of the language in the email below. Is the Mueller data suggestive of equivalence?

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To: Corbin, Mark <Corbin.Mark@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
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Ex. 5 Deliberative Process (DP)

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I think tl

Ex. 5 Deliberative Process (DP)

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mark

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List works for me.

Attached is the revised write-up addressing Mark's questions. I don't think I **Ex. 5 Deliberative Process (DP)**

Ex. 5 Deliberative Process (DP)

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Revised

Mark do you want to send this to Marietta for her consideration in advance of next week's meetings?

Ex. 5 Deliberative Process (DP)

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Ex. 5 Deliberative Process (DP)

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correct

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So adding to the key, just so I keep things straight

Clarity -
Engenia

Ex. 4 CBI

From: Peck, Charles

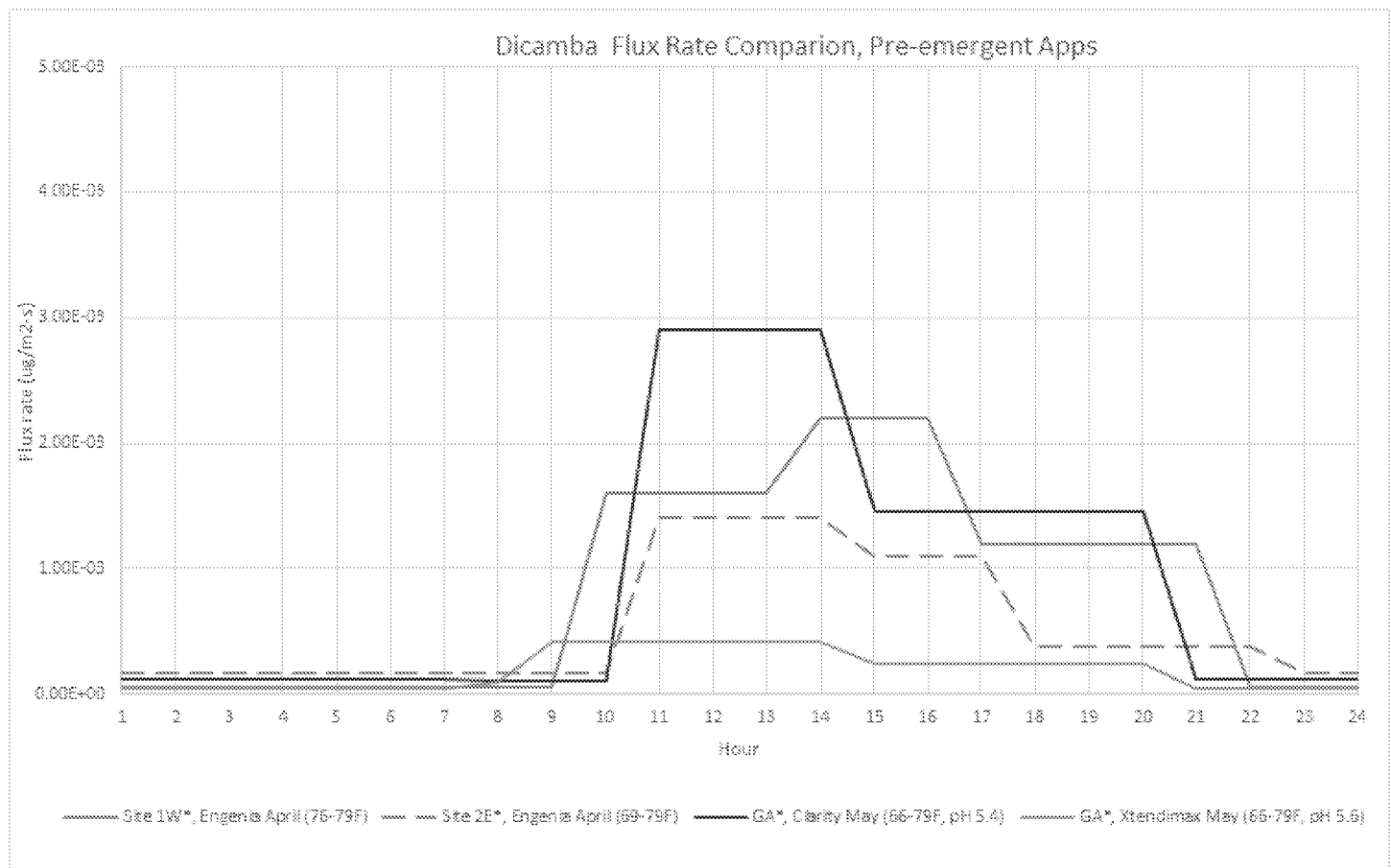
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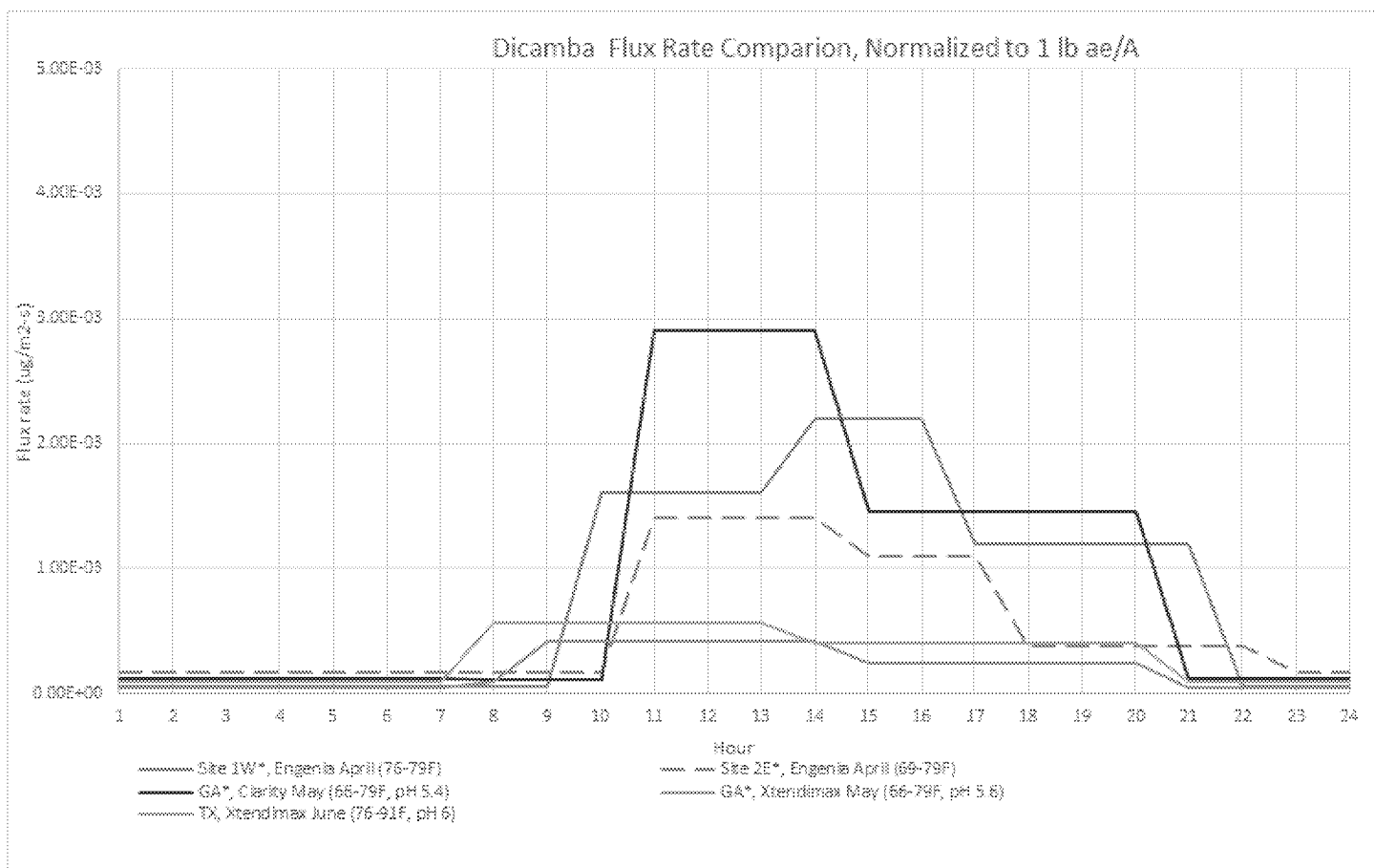
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Ex. 5 Deliberative Process (DP)



Ex. 5 Deliberative Process (DP)



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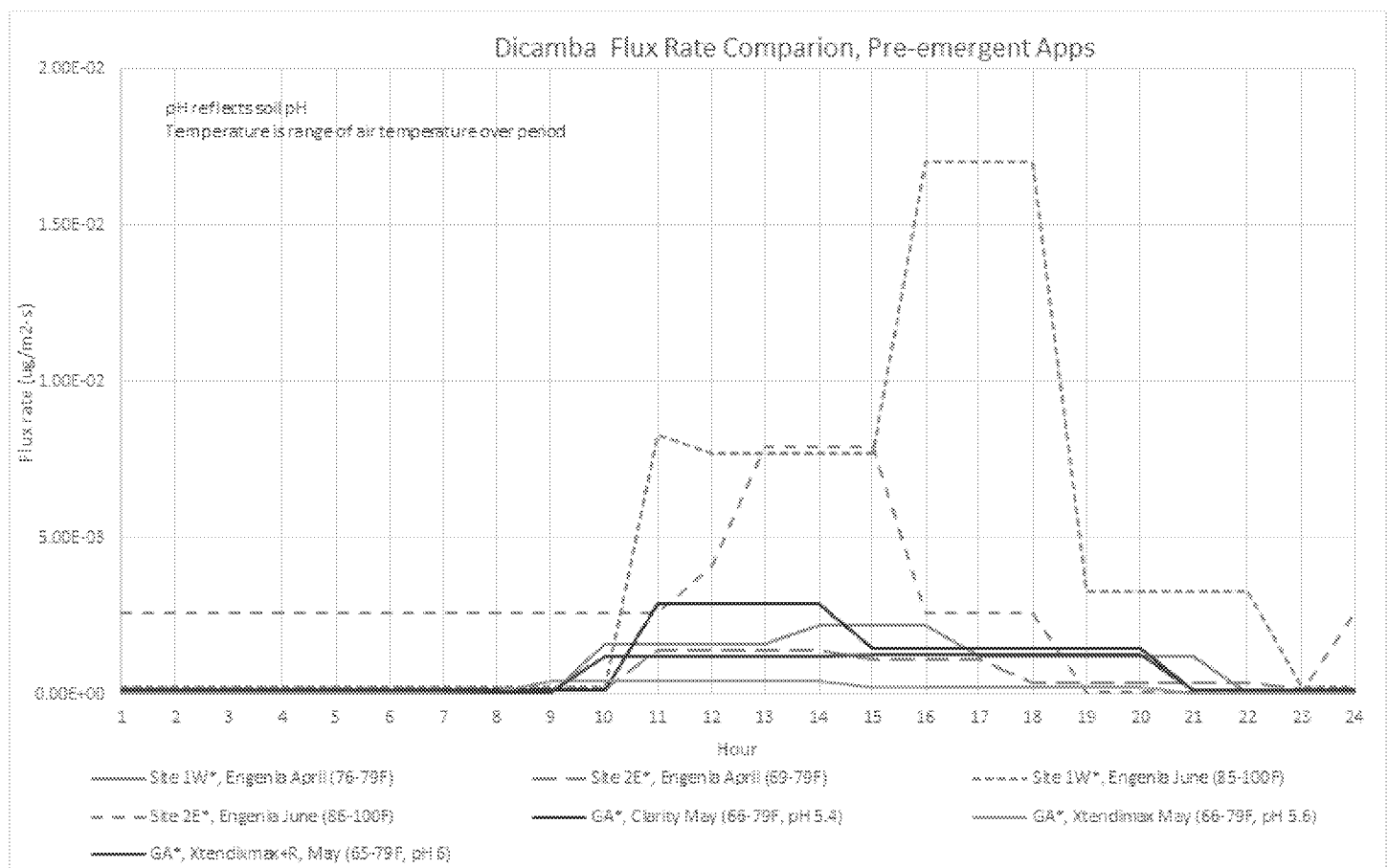
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Ex. 5 Deliberative Process (DP)

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Chuck

Not sure if you are working tomorrow but when

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ed, does that sound right?

Thx

Mark

Sent from my iPhone

Message

From: Corbin, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1DB182663B134E46B3FEC580F8E0B5F2-MARK CORBIN]
Sent: 9/9/2018 10:47:31 PM
To: Echeverria, Marietta [Echeverria.Marietta@epa.gov]
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Ok, doing it now

From: Echeverria, Marietta
Sent: Friday, September 07, 2018 8:43 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>
Subject: Re: FYI Monsanto Position Paper - RE: Dicamba volatility

Please schedule

Sent from my iPhone

On Sep 7, 2018, at 8:29 PM, Corbin, Mark <Corbin.Mark@epa.gov> wrote:

I can do either one.

Sent from my iPhone

On Sep 7, 2018, at 4:45 PM, Echeverria, Marietta <Echeverria.Marietta@epa.gov> wrote:

Mark, Can we meet at 10 or 11 on Monday to discuss strategy for discussions with registrants? We will be talking to BASF at 1 pm on Monday and with Bayer on Tuesday (not yet scheduled). Reuben if you are scheduling the Bayer meeting on Tuesday, I can't be there until after 3 pm, if possible.

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 3:44 PM
To: Peck, Charles <Peck.Charles@epa.gov>
Cc: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

See in red.

From: Peck, Charles
Sent: Friday, September 07, 2018 3:36 PM
To: Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>; Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Ed,

1.

Ex. 5 Deliberative Process (DP)

2. **Ex. 5 Deliberative Process (DP)**

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Odenkirchen, Edward
Sent: Friday, September 07, 2018 3:15 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Echeverria, Marietta
<Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark
<Corbin.Mark@epa.gov>
Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Chuck, you that man....now two issue and two questions

1. **Ex. 5 Deliberative Process (DP)**

2. **Ex. 5 Deliberative Process (DP)**

From: Peck, Charles

Sent: Friday, September 07, 2018 3:05 PM

To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Odenkirchen, Edward <Odenkirchen.Edward@epa.gov>

Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Draft Internal Deliberative, Do Not Quote or Cite

Here is an email I sent to Brian a while back on my take of their position paper.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Peck, Charles

Sent: Tuesday, August 07, 2018 4:04 PM

To: Anderson, Brian <Anderson.Brian@epa.gov>

Subject: RE: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian,

So looking at this document, **Ex. 5 Deliberative Process (DP)**

1.

2. **Ex. 5 Deliberative Process (DP)**

3.

4.

5.

Ex. 5 Deliberative Process (DP)

6.

7.

Let me know if you have any questions.

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Anderson, Brian
Sent: Tuesday, August 07, 2018 2:02 PM
To: Peck, Charles <Peck.Charles@epa.gov>
Subject: FW: FYI Monsanto Position Paper - RE: Dicamba volatility

Can you do a quick read of this? Would be good to know if this has validity or has some insight?

From: Hathaway, Margaret
Sent: Tuesday, August 07, 2018 2:00 PM
To: Anderson, Brian <Anderson.Brian@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>; Wait, Monica <Wait.Monica@epa.gov>; Schmid, Emily <Schmid.Emily@epa.gov>;

Meadows, Sarah <Meadows.Sarah@epa.gov>

Subject: FYI Monsanto Position Paper - RE: Dicamba volatility

Hi Brian:

Thanks very much for this summary of EFED's conclusions thus far. On a related note, Monsanto emailed Reuben today with a copy of a position paper (attached) entitled "THE SCIENTIFIC BASIS FOR UNDERSTANDING THE OFF-TARGET MOVEMENT POTENTIAL OF XTENDIMAX" in support of the continued registration of XtendiMax Herbicide for use on dicamba-tolerant soybeans and cotton.

RD is still deciding whether or not this needs to be formally beamed, but I think it would be good for EFED to at least have a courtesy copy. I'm still reading the document, but noted that Monsanto states that "there is no material difference in the volatility characteristics of XtendiMax across a wide range of soil types and pH levels, geographies, and temperatures, rebutting any hypotheses that such variations may cause volatility in quantities that will impact plant height outside of the treated field."

- Meg

From: Anderson, Brian

Sent: Tuesday, August 07, 2018 8:18 AM

To: Baris, Reuben <Baris.Reuben@epa.gov>; Hathaway, Margaret

<Hathaway.Margaret@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>

Cc: Peck, Charles <Peck.Charles@epa.gov>; Eckel, William <Eckel.William@epa.gov>;

Wait, Monica <Wait.Monica@epa.gov>

Subject: Dicamba volatility

Hi RD Dicamba Team,

Chuck put together a summary of the two new volatility studies. The results are graphed at the end overlaid with the results of the previously submitted data. The

Ex. 5 Deliberative Process (DP)

In addition to these field volatility studies, we also have some data from humidome studies that were emailed to us from Tom Mueller – we don't think these data can really be used/or released because it's pre-publication. He's trying to get it published now.

Ex. 5 Deliberative Process (DP)

and that lower pH of the tank mix seems to be associated with greater volatility. We have summarized that data as well, but we'd like to talk more before sending that summary to you guys just because of the concerns of it being pre-publication and that it may not be usable because of that – the main points that we gleaned from the data are below though. So basically, the story so far is that:

1. Dicamba is semi-volatile. New formulations were submitted over the last several years for over the top use to cotton and soybean that claimed decreased volatility.
2. EFED's initial risk assessment evaluated volatility based on available field volatility studies for the new formulations. The modeling suggested that volatility is not expected to result in effects to non-target plants off the field.

3.

4.

Ex. 5 Deliberative Process (DP)

5. Pre-publication (preliminary Mueller data) data also suggests that dicamba volatilization appears to increase with decreases in the tank mix pH (none of the submitted field studies included tank mix measurements of pH).
6. We are evaluating whether or not the results of the new studies would result in different conclusions with regard to non-target plant effects from volatility.

Thanks

Brian

Brian Anderson
Office of Pesticide Programs
Environmental Fate and Effects Division
703.305.0067

Message

From: Corbin, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1DB182663B134E46B3FEC580F8E0B5F2-MARK CORBIN]
Sent: 10/23/2018 5:48:47 PM
To: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]; Peck, Charles [Peck.Charles@epa.gov]
Subject: RE: Uncertainties

Is there a way to synthesis this down into a short section that can drop in the assessment? Seems like there is a lot here that gets at what Marietta is looking for. Coupled with Chuck's piece on pH and volatility and Jen's piece on the GIS resolution uncertainty it would probably get at most of that

mark

From: Odenkirchen, Edward
Sent: Tuesday, October 23, 2018 1:32 PM
To: Peck, Charles <Peck.Charles@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Subject: FW: Uncertainties

Stuff won uncertainties and limitatons we sent over this week

From: Odenkirchen, Edward
Sent: Friday, October 19, 2018 11:13 AM
To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>
Subject: Uncertainties

Ex. 5 Deliberative Process (DP)

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Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Montague, Kathryn V. [Montague.Kathryn@epa.gov]
Sent: 11/28/2018 6:52:57 PM
To: Corbin, Mark [Corbin.Mark@epa.gov]
CC: Sankula, Sujatha [Sankula.Sujatha@epa.gov]; Orrick, Greg [Orrick.Greg@epa.gov]; Khan, Faruque [Khan.Faruque@epa.gov]; Peck, Charles [Peck.Charles@epa.gov]
Subject: RE: Dicamba and Enlist tank mix drift testing - question about DRAs

OK, thank you! The websites do indicate when a DRA must be used.

Thanks,
Kay

From: Corbin, Mark
Sent: Wednesday, November 28, 2018 11:12 AM
To: Montague, Kathryn V. <Montague.Kathryn@epa.gov>
Cc: Sankula, Sujatha <Sankula.Sujatha@epa.gov>; Orrick, Greg <Orrick.Greg@epa.gov>; Khan, Faruque <Khan.Faruque@epa.gov>; Peck, Charles <Peck.Charles@epa.gov>
Subject: RE: Dicamba and Enlist tank mix drift testing - question about DRAs

Kay

We kicked this around here. take a look at the email string below and let us know if you have any questions

mark

From: Khan, Faruque
Sent: Wednesday, November 28, 2018 10:41 AM
To: Peck, Charles <Peck.Charles@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>
Cc: Sankula, Sujatha <Sankula.Sujatha@epa.gov>; Orrick, Greg <Orrick.Greg@epa.gov>
Subject: RE: Dicamba and Enlist tank mix drift testing - question about DRAs

Thanks Chuck. Same standard procedure as dicamba also applicable to Enlist tank mixes. Faruque

From: Peck, Charles
Sent: Wednesday, November 28, 2018 9:37 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>
Cc: Khan, Faruque <Khan.Faruque@epa.gov>
Subject: RE: Dicamba and Enlist tank mix drift testing - question about DRAs

So long as the website indicates that when you mix with the product you must use a DRA, it should be ok. The Xtendimax website currently indicates this.

From: Corbin, Mark
Sent: Wednesday, November 28, 2018 9:27 AM
To: Peck, Charles <Peck.Charles@epa.gov>
Cc: Khan, Faruque <Khan.Faruque@epa.gov>
Subject: FW: Dicamba and Enlist tank mix drift testing - question about DRAs

Thoughts?

From: Montague, Kathryn V.

Sent: Wednesday, November 28, 2018 9:25 AM

To: Corbin, Mark <Corbin.Mark@epa.gov>; Khan, Faruque <Khan.Faruque@epa.gov>

Cc: Schmid, Emily <Schmid.Emily@epa.gov>

Subject: Dicamba and Enlist tank mix drift testing - question about DRAs

Good Morning,

I'm noticing:

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks,
Kay

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division
Office of Pesticide Programs
(703)305-1243

Message

From: Sankula, Sujatha [Sankula.Sujatha@epa.gov]
Sent: 11/28/2018 4:03:41 PM
To: Corbin, Mark [Corbin.Mark@epa.gov]; Khan, Faruque [Khan.Faruque@epa.gov]
CC: Peck, Charles [Peck.Charles@epa.gov]; Orrick, Greg [Orrick.Greg@epa.gov]
Subject: RE: Dicamba and Enlist tank mix drift testing - question about DRAs

Go ahead Mark, Faruque and I talked about this few minutes ago.

From: Corbin, Mark
Sent: Wednesday, November 28, 2018 11:03 AM
To: Khan, Faruque <Khan.Faruque@epa.gov>
Cc: Peck, Charles <Peck.Charles@epa.gov>; Sankula, Sujatha <Sankula.Sujatha@epa.gov>; Orrick, Greg <Orrick.Greg@epa.gov>
Subject: Re: Dicamba and Enlist tank mix drift testing - question about DRAs

If you all are ok with this I can forward to RD

Let me know

Sent from my iPhone

On Nov 28, 2018, at 10:41 AM, Khan, Faruque <Khan.Faruque@epa.gov> wrote:

<image001.gif>

Thanks Chuck. Same standard procedure as dicamba also applicable to Enlist tank mixes. Faruque

From: Peck, Charles
Sent: Wednesday, November 28, 2018 9:37 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>
Cc: Khan, Faruque <Khan.Faruque@epa.gov>
Subject: RE: Dicamba and Enlist tank mix drift testing - question about DRAs

So long as the website indicates that when you mix with the product you must use a DRA, it should be ok. The Xtendimax website currently indicates this.

From: Corbin, Mark
Sent: Wednesday, November 28, 2018 9:27 AM
To: Peck, Charles <Peck.Charles@epa.gov>
Cc: Khan, Faruque <Khan.Faruque@epa.gov>
Subject: FW: Dicamba and Enlist tank mix drift testing - question about DRAs

Thoughts?

From: Montague, Kathryn V.
Sent: Wednesday, November 28, 2018 9:25 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Khan, Faruque <Khan.Faruque@epa.gov>
Cc: Schmid, Emily <Schmid.Emily@epa.gov>
Subject: Dicamba and Enlist tank mix drift testing - question about DRAs

Good Morning,

I'm noticing

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks,
Kay

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division
Office of Pesticide Programs
(703)305-1243

Message

From: Peck, Charles [Peck.Charles@epa.gov]
Sent: 11/26/2018 6:37:13 PM
To: Corbin, Mark [Corbin.Mark@epa.gov]
Subject: RE: Dicamba questions - AAPCO - shallow groundwater statement

Let's talk so I can get a clear idea of what you're looking for.

From: Corbin, Mark
Sent: Monday, November 26, 2018 12:16 PM
To: Peck, Charles <Peck.Charles@epa.gov>
Subject: RE: Dicamba questions - AAPCO - shallow groundwater statement

Thanks

When you complete the email review can you send me an email confirming its done and what you found?

Thx

mark

From: Peck, Charles
Sent: Monday, November 26, 2018 12:12 PM
To: Corbin, Mark <Corbin.Mark@epa.gov>
Subject: RE: Dicamba questions - AAPCO - shallow groundwater statement

Looking at the Banvel label (Reg no 51036-289), it looks like the gw label language was changed in Feb 1999

Chuck Peck
OPP/EFED/ERB VI
Potomac Yard South
Crystal City, VA
Room 10244
(703) 347-8064
peck.charles@epa.gov

From: Corbin, Mark
Sent: Monday, November 26, 2018 11:13 AM
To: Peck, Charles <Peck.Charles@epa.gov>
Subject: FW: Dicamba questions - AAPCO - shallow groundwater statement

Here is the language I mentioned

From: Hathaway, Margaret
Sent: Monday, November 26, 2018 9:49 AM
To: Chiu, Enid <Chiu.Enid@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Baris, Reuben <Baris.Reuben@epa.gov>; Corbin, Mark <Corbin.Mark@epa.gov>; Courtnage, Robert <Courtnage.Robert@EPA.GOV>; Han, Kaythi <Han.Kaythi@epa.gov>; Goerke, Ariadne <Goerke.Ariadne@epa.gov>; Knorr, Michele <Knorr.Michele@epa.gov>; Perlis, Robert <Perlis.Robert@epa.gov>; Teter, Royan <Teter.Royan@epa.gov>

Cc: O'Neill, Sandra <O'Neill.Sandra@epa.gov>; Hopkins, Yvette <Hopkins.Yvette@epa.gov>

Subject: RE: Dicamba questions - AAPCO - shallow groundwater statement

FYI for the group, the shallow ground water statement* is indeed legacy language that predates the registration of OTT uses. I checked the 524-617 M1768 HERBICIDE May 01, 2014 label (the pre-OTT XtendiMax label) from PPLS and the statement is there.

- Meg Hathaway

*"Do not apply to soils classified as sand with less than 3% organic matter and where ground water depth is shallow."

Margaret Hathaway (Meg)
Chemical Review Manager
U.S. Environmental Protection Agency
OCSPP: Office of Pesticide Programs
Pesticide Re-Evaluation Division RMIB II
hathaway.margaret@epa.gov
(703) 305-5076

-----Original Appointment-----

From: Chiu, Enid

Sent: Monday, November 19, 2018 7:58 AM

To: Chiu, Enid; Rosenblatt, Daniel; Kenny, Daniel; Baris, Reuben; Hathaway, Margaret; Corbin, Mark; Courtnage, Robert; Han, Kaythi; Goerke, Ariadne; Knorr, Michele; Perlis, Robert; Teter, Royan

Cc: O'Neill, Sandra; Hopkins, Yvette

Subject: Dicamba questions - AAPCO

When: Monday, November 26, 2018 9:00 AM-10:00 AM (UTC-05:00) Eastern Time (US & Canada).

Where: DCRoomPYS8100/Potomac-Yard-One

Meeting to discuss several dicamba implementation questions (below) submitted by Dave Scott following the post-decision call with AAPCO.

This was the earliest I could schedule a meeting with the upcoming holiday. Feel free to submit thoughts through email.

Conference phone number:

+1 [Ex. 6 Personal Privacy (PP)]

Conference ID:

[Ex. 6 Personal Privacy (PP)]

1. **Will 24 C labels be allowed to make labels more restrictive, if state determines it to be necessary to ensure "no unreasonable adverse effect" from the post-emergent use of these products?**

EPA recognizes and supports the important authority FIFRA section 24(c) gives the states for issuing locally appropriate regulations for pesticide use. If a state wishes to modify the over-the-top labels for dicamba to better meet their circumstances, the Agency will work with them to support their goals.

2. **Does "for retail sale to and use only by certified applicators" mean that applicators who are not fully certified, i.e. registered technicians who have passed only the core/general standards exam, cannot purchase or use these products?**

The products may only be purchased and applied by a certified applicator, not by someone under the supervision of a certified applicator. Non-certified personnel may not perform any activities with dicamba products, including mixing or loading. EPA is working with the states to ensure consistent interpretation of "certified applicator".

3. **Does the training requirements reference to "before applying this product in-crop" suggest that the CRP and noncropland uses are not covered by the training requirements?**

Training requirements apply to any use of the product, not just in-crop use. Note to RD: this may need to be edited in the label.

4. **Application records must include start and stop times. If the wind direction shifts toward neighboring sensitive crops or residential areas, and the applicator stops the application, but doesn't pick up the application until the following day, is that a separate application or the same one?**

Need input on this

5. **The label states, "DO NOT apply to spoils classified as sand with less than 3% organic matter and where groundwater depth is shallow." How deep is shallow?**

Need input on this

The resistance management section states, "the following steps should be followed", but then states "DO NOT rely on a single herbicide site of action..." We assume the DO NOT is for effect and not enforceable, correct?

Correct. Please confirm

The label states, "DO NOT apply XXX later than 45 days after planting or R1, whichever comes first." Any suggestions on how to document planting date or R1 growth stage 3-8 weeks after application?

Need input on this

The label states, that non-sensitive crops and areas include, "Roads, paved or gravel surfaces, mowed and/or managed areas adjacent to field, such as roadside rights-of-way." We assume this means that mowed and/or managed roadsides are no longer to be protected by buffers, correct?

Correct. Including roadside rights-of-way as non-sensitive areas was intended to aid in buffer calculations.

The spray drift management section states, "DO NOT allow herbicide solution to drip, physically drift or splash onto desirable vegetation..." We assume that physical drift excludes off-target movement from volatility, but does "physical drift" include or exclude off-target movement from application into an inversion? Our understanding is that application into an inversion should affect all pesticides equally, regardless of active ingredient, correct?

EPA is looking forward to further discussing this issue and coordinating with the states. When will this happen?

Do the endangered species and corresponding buffer zones apply to all endangered species or just endangered terrestrial dicot plant species, as suggested by BASF? Have conversations occurred to clarify these issues with the registrants?

The buffer requirement was made after we assessed potential risk to both animals and plants that are federally listed as endangered or threatened species. For the full list of species that were assessed in the effects determination document, see the recent and previous assessments:

<https://www.regulations.gov/document?D=EPA-HQ-OPP-2016-0187-0967>. EPA made a determination that the previous effects determinations of taxa other than non-monocot plants were accepted without change.

The sensitive crops and residential areas section states, "DO NOT apply when wind is blowing in the direction of neighboring sensitive crops or residential areas. The appropriate distance must be determined by the applicator relative to where the application is being made, the environmental conditions, and the potential risk to downwind sensitive crops and residential areas." What specifically does that mean? It seems very non-specific and vague. It appears that it provides no real direction or instruction to the applicator, rendering it unenforceable? Can the agency provide additional direction on the intent of this statement?

Need input on this

Message

From: Corbin, Mark [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=1DB182663B134E46B3FEC580F8E0B5F2-MARK CORBIN]
Sent: 11/28/2018 4:02:43 PM
To: Khan, Faruque [Khan.Faruque@epa.gov]
CC: Peck, Charles [Peck.Charles@epa.gov]; Sankula, Sujatha [Sankula.Sujatha@epa.gov]; Orrick, Greg [Orrick.Greg@epa.gov]
Subject: Re: Dicamba and Enlist tank mix drift testing - question about DRAs

If you all are ok with this I can forward to RD

Let me know

Sent from my iPhone

On Nov 28, 2018, at 10:41 AM, Khan, Faruque <Khan.Faruque@epa.gov> wrote:

<image001.gif>

Thanks Chuck. Same standard procedure as dicamba also applicable to Enlist tank mixes. Faruque

From: Peck, Charles
Sent: Wednesday, November 28, 2018 9:37 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>
Cc: Khan, Faruque <Khan.Faruque@epa.gov>
Subject: RE: Dicamba and Enlist tank mix drift testing - question about DRAs

So long as the website indicates that when you mix with the product you must use a DRA, it should be ok. The Xtendimax website currently indicates this.

From: Corbin, Mark
Sent: Wednesday, November 28, 2018 9:27 AM
To: Peck, Charles <Peck.Charles@epa.gov>
Cc: Khan, Faruque <Khan.Faruque@epa.gov>
Subject: FW: Dicamba and Enlist tank mix drift testing - question about DRAs

Thoughts?

From: Montague, Kathryn V.
Sent: Wednesday, November 28, 2018 9:25 AM
To: Corbin, Mark <Corbin.Mark@epa.gov>; Khan, Faruque <Khan.Faruque@epa.gov>
Cc: Schmid, Emily <Schmid.Emily@epa.gov>
Subject: Dicamba and Enlist tank mix drift testing - question about DRAs

Good Morning,

I'm noticing

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Thanks,
Kay

Kathryn V. Montague
Product Manager 23
Herbicide Branch
Registration Division
Office of Pesticide Programs
(703)305-1243

Message

From: Dunn, Alexandra [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=426D0177EAAB4001A5C85F051565997E-DUNN, ALEXA]
Sent: 11/27/2018 4:44:29 PM
To: Kaiser, Sven-Erik [Kaiser.Sven-Erik@epa.gov]
CC: Frye, Tony (Robert) [frye.robert@epa.gov]
Subject: Re: Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season – KTTN-FM 92.3 and KGOZ -FM 101.7 Serving north Missouri

Yes. I will review!

Sent from my iPhone

Alexandra Dapolito Dunn, J.D.
Regional Administrator
Region 1 New England
(617) 918-1012

This email is for official EPA business only and may be subject to disclosure under the Freedom of information Act

On Nov 27, 2018, at 11:34 AM, Kaiser, Sven-Erik <Kaiser.Sven-Erik@epa.gov> wrote:

Alex – did you see the Missouri statement – supported EPA action on Dicamba. For awareness as there are no Missouri senators on SEPW. Thanks,
Sven

Sven-Erik Kaiser
U.S. EPA
Office of Congressional and Intergovernmental Relations
1200 Pennsylvania Ave., NW (1305A)
Washington, DC 20460
202-566-2753 (o)
202-591-0619 (c)

Begin forwarded message:

From: "Jackson, Ryan" <jackson.ryan@epa.gov>
Date: November 22, 2018 at 10:53:06 AM EST
To: "Lyons, Troy" <lyons.troy@epa.gov>, "Palich, Christian" <palich.christian@epa.gov>
Subject: Fwd: Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season – KTTN-FM 92.3 and KGOZ -FM 101.7 Serving north Missouri

We need to include in Andrew and Alex confirmation book.

Ryan Jackson
Chief of Staff
U.S. EPA
202-564-6999

Begin forwarded message:

From: "Bennett, Tate" <Bennett.Tate@epa.gov>
Date: November 21, 2018 at 10:33:55 PM EST
To: "Jackson, Ryan" <jackson.ryan@epa.gov>
Cc: "Beck, Nancy" <Beck.Nancy@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>, "Molina, Michael" <molina.michael@epa.gov>
Subject: Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season – KTTN-FM 92.3 and KGOZ -FM 101.7 Serving north Missouri

Missouri compliments our approach this year. Well done OCSPP!

"We understand it is a challenging task to balance the interests of producers across the United States, but the EPA has worked diligently with registrants to provide a balanced approach," said Missouri Director of Agriculture Chris Chinn.

<https://www.kttm.com/missouri-department-of-agriculture-issues-statement-on-dicamba-products-for-the-2019-growing-season/>

Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season

Post Views: 37

November 21, 2018

The Missouri Department of Agriculture announced it will not pursue Special Local Needs (24c) labels for the use of Engenia, FeXapan, and XtendiMax for the 2019 growing season. This announcement follows the Environmental Protection Agency's (EPA) decision to extend the registration of these three Dicamba products for another two years with additional safeguards.

The Missouri Department of Agriculture appreciates the thoughtful approach taken by EPA in the re-registration process, and our staff looks forward to working with industry partners, agriculture organizations and academia to ensure growers are aware of and follow the new federal requirements.

“We understand it is a challenging task to balance the interests of producers across the United States, but the EPA has worked diligently with registrants to provide a balanced approach,” said Missouri Director of Agriculture Chris Chinn.

EPA has enhanced the previous labels and put in place additional safeguards in an effort to increase the success and safe use of the product in the field.

The two-year registration is valid through Dec. 20, 2020, and includes the following:

- Only certified applicators may apply Dicamba over-the-top (those working under the supervision of a certified applicator may no longer make applications)
- Prohibit over-the-top application of Dicamba on soybeans 45 days after planting or up until the R1 growth stage (first bloom), whichever comes first
- Prohibit over-the-top application of Dicamba on cotton 60 days after planting
- For cotton, limit the number of over-the-top applications from four to two
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- Enhanced tank clean-out instructions for the entire system
- Enhanced label to improve applicator awareness on the impact of low pH on the potential volatility of Dicamba
- Label clean up and consistency to improve compliance and enforceability

The new label instructions and requirements will be covered in the required Dicamba or auxin-specific training available online through the University of Missouri Extension, or through training offered by Bayer, BASF and Corteva for their respective products.

For more information about the Missouri Department of Agriculture, visit the Department online at Agriculture.Mo.Gov.

Message

From: Dunn, Alexandra [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=426D0177EAAB4001A5C85F051565997E-DUNN, ALEXA]
Sent: 11/22/2018 3:55:56 PM
To: Jackson, Ryan [jackson.ryan@epa.gov]
Subject: Re: Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season – KTTN-FM 92.3 and KGOZ -FM 101.7 Serving north Missouri

Thanks! Happy Thanksgiving!

Sent from my iPhone

Alexandra Dapolito Dunn, J.D.
Regional Administrator
Region 1 New England
(617) 918-1012

This email is for official EPA business only and may be subject to disclosure under the Freedom of information Act

On Nov 22, 2018, at 10:53 AM, Jackson, Ryan <jackson.ryan@epa.gov> wrote:

FYI for hearing.

Ryan Jackson
Chief of Staff
U.S. EPA
202-564-6999

Begin forwarded message:

From: "Bennett, Tate" <Bennett.Tate@epa.gov>
Date: November 21, 2018 at 10:33:55 PM EST
To: "Jackson, Ryan" <jackson.ryan@epa.gov>
Cc: "Beck, Nancy" <Beck.Nancy@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>, "Molina, Michael" <molina.michael@epa.gov>
Subject: Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season – KTTN-FM 92.3 and KGOZ -FM 101.7 Serving north Missouri

Missouri compliments our approach this year. Well done OCSPP!

“We understand it is a challenging task to balance the interests of producers across the United States, but the EPA has worked diligently with registrants to provide a balanced approach,” said Missouri Director of Agriculture Chris Chinn.

<https://www.kttm.com/missouri-department-of-agriculture-issues-statement-on-dicamba-products-for-the-2019-growing-season/>

Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season

Post Views: 37

November 21, 2018

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Message

From: Echeverria, Marietta [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=36C56B7169144626BD6AADEA25992D4E-MARIETTA ECHEVERRIA]
Sent: 10/19/2018 3:22:53 PM
To: Odenkirchen, Edward [Odenkirchen.Edward@epa.gov]
Subject: Re: Uncertainties

Got it and sent forward.

Sent from my iPhone

On Oct 19, 2018, at 11:12 AM, Odenkirchen, Edward <Odenkirchen.Edward@epa.gov> wrote:

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Echeverria, Marietta [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=36C56B7169144626BD6AADEA25992D4E-MARIETTA ECHEVERRIA]
Sent: 10/19/2018 3:15:21 PM
To: Knorr, Michele [knorr.michele@epa.gov]; Perlis, Robert [Perlis.Robert@epa.gov]
Subject: Fwd: Uncertainties

Sent from my iPhone

Begin forwarded message:

From: "Odenkirchen, Edward" <Odenkirchen.Edward@epa.gov>
Date: October 19, 2018 at 11:12:31 AM EDT
To: "Echeverria, Marietta" <Echeverria.Marietta@epa.gov>
Subject: Uncertainties

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Ex. 5 Deliberative Process (DP)

Message

From: Keigwin, Richard [Keigwin.Richard@epa.gov]
Sent: 11/22/2018 11:40:56 AM
To: Messina, Edward [Messina.Edward@epa.gov]; Miller, Wynne [Miller.Wynne@epa.gov]; Echeverria, Marietta [Echeverria.Marietta@epa.gov]; Goodis, Michael [Goodis.Michael@epa.gov]
Subject: Fwd: **FOR IMMEDIATE RELEASE: Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season

Rick Keigwin
Director, Office of Pesticide Programs
U.S. Environmental Protection Agency
Phone: 703-305-7090
Website: www.epa.gov/pesticides
Sent from my iPhone

Begin forwarded message:

From: "Subramanian, Hema" <Subramanian.Hema@epa.gov>
Date: November 21, 2018 at 7:19:10 PM EST
To: "Beck, Nancy" <Beck.Nancy@epa.gov>
Cc: "Bennett, Tate" <Bennett.Tate@epa.gov>, "Keigwin, Richard" <Keigwin.Richard@epa.gov>, "Keller, Kaitlin" <keller.kaitlin@epa.gov>, "Bertrand, Charlotte" <Bertrand.Charlotte@epa.gov>, "Baptist, Erik" <Baptist.Erik@epa.gov>
Subject: Re: **FOR IMMEDIATE RELEASE: Missouri Department of Agriculture issues statement on Dicamba products for the 2019 growing season

And a couple other updates from R6 Ag Advisor. Happy Thanksgiving all.

PLANT BOARD RECEIVES NEW DICAMBA COMMENTS PRIOR TO MEETING

NOVEMBER 20, 2018

The Arkansas State Plant Board received two new letters or petitions related to the issue of dicamba in advance of its upcoming November 26th pesticide committee meeting, which is expected to be the beginnings of a rule making process. The rule making process is being initiated in accordance to action taken by the Plant Board at a November 5th Plant Board meeting.

[READ MORE](#)

Controversial weed killer may force some farmers out of business, News Channel 5, 11/19/18

<https://www.newschannel5.com/news/newschannel-5-investigates/controversial-weed-killer-may-force-some-farmers-out-of-business>

Some farmers are claiming a controversial weed killer is forcing them out of business. Just last month the EPA approved the use of Dicamba use for another two years with some new restrictions.

Hema Subramanian
Office of the Administrator
U.S. Environmental Protection Agency
Washington, DC
office: (202) 564-5041
cell: 202-815-0472

On Nov 21, 2018, at 7:12 PM, Beck, Nancy <Beck.Nancy@epa.gov> wrote:

Thanks. I didn't expect that one.

Nancy B. Beck, Ph.D., DABT
Deputy Assistant Administrator
Office of Chemical Safety and Pollution Prevention
P: 202-564-1273
beck.nancy@epa.gov

On Nov 21, 2018, at 7:10 PM, Subramanian, Hema
<Subramanian.Hema@epa.gov> wrote:

Hema Subramanian
Office of the Administrator
U.S. Environmental Protection Agency
Washington, DC
office: (202) 564-5041
cell: 202-815-0472

Begin forwarded message:

From: "Jones, Doug" <jones.doug@epa.gov>
Date: November 21, 2018 at 3:18:46 PM EST
To: "Subramanian, Hema"
<Subramanian.Hema@epa.gov>
Subject: FW: **FOR IMMEDIATE RELEASE:
Missouri Department of Agriculture issues
statement on Dicamba products for the 2019
growing season

FYI

Doug Jones | Agriculture Advisor | Office of the
Regional Administrator | U.S. EPA Region 7 | 11201
Renner Blvd | Lenexa, KS 66219 | (913) 551-7592

From: Green, Jamie

Sent: Wednesday, November 21, 2018 2:10 PM

To: Robichaud, Jeffery <Robichaud.Jeffery@epa.gov>;
Huffman, Diane <Huffman.Diane@epa.gov>; Jones,
Doug <jones.doug@epa.gov>; Carey, Curtis
<Carey.Curtis@epa.gov>

Subject: Fwd: **FOR IMMEDIATE RELEASE: Missouri
Department of Agriculture issues statement on Dicamba
products for the 2019 growing season

Sent from my iPhone

Begin forwarded message:

From: "Bailey, Paul"

<Paul.Bailey@mda.mo.gov>

Date: November 21, 2018 at 8:29:07
AM CST

To: "'Green, Jamie'"

<Green.Jamie@epa.gov>, 'Janet
Hou' <janet.hou@basf.com>,
"'SIMPSON, DUANE J [AG/1005]'"
<duane.simpson@bayer.com>

**Subject: FW: **FOR
IMMEDIATE RELEASE:
Missouri Department of
Agriculture issues statement on
Dicamba products for the 2019
growing season**

FYI -- MDA news release.

Paul Bailey
Director, Plant Industries
Missouri Department of Agriculture
P.O. Box 630
Jefferson City, MO 65102
573-751-2462
Paul.Bailey@mda.mo.gov

From: Missouri Department of
Agriculture

<MDA@public.govdelivery.com>

Sent: Tuesday, November 20, 2018 5:22
PM

To: Bailey, Paul

[<Paul.Bailey@mda.mo.gov>](mailto:Paul.Bailey@mda.mo.gov)

Subject: **FOR IMMEDIATE RELEASE:
Missouri Department of Agriculture
issues statement on Dicamba products
for the 2019 growing season

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MISSOURI AGRICULTURE

news

For Immediate Release: Nov. 20, 2018

Media Contact: Sami Jo Freeman,
samijo.freeman@mda.mo.gov, (573) 751-2613

Missouri Department of Agriculture statement on Dicamba products for 2019 growing season

(JEFFERSON CITY, Mo.) — Today, the Missouri Department of Agriculture announced it will not pursue Special Local Needs (24c) labels for the Engenia, FeXapan and XtendiMax for the 2019 growing season. This announcement follows the Environmental Protection Agency's (EPA) decision to extend the registration of these three Dicamba products for another year with additional safeguards.

The Missouri Department of Agriculture appreciates the thoughtful taken by EPA in the re-registration process, and our staff looks forward to working with industry partners, agriculture organizations and academia to ensure growers are aware of and follow the new federal requirements.

“We understand it is a challenging task to balance the interests of producers across the United States, but the EPA has worked diligently with regulators to provide a balanced approach,” said Missouri Director of Agriculture Chris Chinn.

EPA has enhanced the previous labels and put in place additional safety measures in an effort to increase the success and safe use of the product in the field.

The two-year registration is valid through Dec. 20, 2020, and includes the following:

- Only certified applicators may apply Dicamba over-the-top (OT) (OT applicators working under the supervision of a certified applicator may make applications)
- Prohibit over-the-top application of Dicamba on soybeans 4 weeks after planting or up until the R1 growth stage (first bloom), whichever comes first
- Prohibit over-the-top application of Dicamba on cotton 60 days after planting
- For cotton, limit the number of over-the-top applications from two
- For soybeans, the number of over-the-top applications remains two
- Applications will be allowed only from one hour after sunrise to two hours before sunset
- In counties where endangered species may exist, the downwind buffer will remain at 110 feet and there will be a new 57-foot buffer on the other sides of the field (the 110-foot downwind buffer applies to all applications, not just in counties where endangered species exist)
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###



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This email was sent to paul.bailey@mda.mo.gov using GovDelivery Communications Cloud on behalf of: Missouri Department of Agriculture · 1616 Missouri Boulevard · Jefferson City, Missouri 65102

Message

From: Echeverria, Marietta [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=36C56B7169144626BD6AADEA25992D4E-MARIETTA ECHEVERRIA]
Sent: 11/26/2018 1:43:26 PM
To: Keigwin, Richard [Keigwin.Richard@epa.gov]
Subject: RE: EPA scientists' dicamba input went unheeded - Arkansas Democrat-Gazette, 11/21/2018

Got it.

From: Keigwin, Richard
Sent: Monday, November 26, 2018 8:43 AM
To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>
Subject: RE: EPA scientists' dicamba input went unheeded - Arkansas Democrat-Gazette, 11/21/2018

Let's chat after staff meeting this morning. Thanks!

From: Echeverria, Marietta
Sent: Monday, November 26, 2018 8:41 AM
To: Keigwin, Richard <Keigwin.Richard@epa.gov>
Subject: RE: EPA scientists' dicamba input went unheeded - Arkansas Democrat-Gazette, 11/21/2018

I know you are on the huddle call now. Do you want me to stop by at 9 am?

From: Keigwin, Richard
Sent: Monday, November 26, 2018 8:26 AM
To: Echeverria, Marietta <Echeverria.Marietta@epa.gov>
Subject: FW: EPA scientists' dicamba input went unheeded - Arkansas Democrat-Gazette, 11/21/2018

Stopped by this morning to discuss.

From: Baris, Reuben
Sent: Wednesday, November 21, 2018 7:23 AM
To: Keigwin, Richard <Keigwin.Richard@epa.gov>; Messina, Edward <Messina.Edward@epa.gov>; Goodis, Michael <Goodis.Michael@epa.gov>; Kenny, Daniel <Kenny.Dan@epa.gov>; Rosenblatt, Daniel <Rosenblatt.Dan@epa.gov>
Subject: EPA scientists' dicamba input went unheeded - Arkansas Democrat-Gazette, 11/21/2018

FYI, if you weren't already aware...

<http://digital.olivesoftware.com/Olive/ODN/ArDemocrat/shared/ShowArticle.aspx?doc=ARDEMOCRAT%2F2018%2F11%2F21&entity=Ar00102&sk=CA51B521&mode=text>

EPA scientists' dicamba input went unheeded

Emails show agency pared 443-foot buffers to 57 feet

Scientists with the federal Environmental Protection Agency recommended restrictions on dicamba use that the agency ultimately ignored when it recently allowed for the spraying of the herbicide on soybeans and cotton for another two years.

Emails obtained by the

Arkansas Democrat-Gazette

through a Freedom of Information Act request show that EPA scientists on Oct. 5 sought 443-foot in-field buffers between areas where dicamba is sprayed and where there may be endangered species.

Those buffers, instead, were set at 57 feet in new regulations announced on Oct. 31 by Andrew Wheeler, the EPA's acting administrator.

The EPA also retained 110-foot downwind buffers from dicamba regulations that began expiring this month and said the new 57-foot buffers for the other sides of the field will provide adequate protection for endangered species. Only certified applicators can spray dicamba, and it is their responsibility to check an EPA website to determine the presence of endangered species, the EPA said.

Scientists with the agency's Environmental Fate and Effects Division, or EFED, sought the 443-foot buffers, according to documents obtained from the University of Arkansas System's Division of Agriculture through the state's open-records law.

The issue of buffers is but one among many in a controversy in which EPA critics say science has been disregarded by the agency and, in some cases, by regulators in states where soybeans are grown.

Thousands of complaints have been filed in several states the past two years alleging that dicamba damaged millions of acres of soybeans and other crops and vegetation susceptible to the weedkiller.

Critics say the EPA's latest restrictions and applicator-training programs, such as those established by dicamba's manufacturers, still do not address the herbicide's "volatility," or its ability to lift off plants as a vapor or gas hours or days after being applied and move to fields even miles away.

EPA representatives visited seven states this summer, held a series of conference calls with weed scientists, state regulators and representatives of the pesticide-industry, and collected data from several field trials conducted the past two years as the agency considered dicamba's future.

While acknowledging that some 1,400 complaints have been made this year of damage to crops and to non-agriculture vegetation in several states, the EPA said dicamba's effectiveness against weeds now resistant to other herbicides outweighed the risks.

OFF TARGET

In a statement Tuesday, the EPA said its final decision was based on its scientists' recommendations, along with other information from "state regulators, farmers, academic researchers, pesticide manufacturers and other stakeholders." The agency said the draft recommendation obtained by the *Democrat-Gazette* "was preliminary in nature" but didn't specify whether, or how, the scientists' recommendation had changed.

In its Freedom of Information request, the *Democrat-Gazette* received a few hundred pages of documents, with most being paper copies of PowerPoint presentations of UA field trials and a dicamba-related thesis by a UA student and doctoral candidate, all of which UA shared with the EPA this summer.

The larger buffers recommended by the EPA scientists arose from the work of Jason Norsworthy, UA professor and weed scientist who ran a large-scale field trial on a 240-acre commercial soybean field this summer to test for dicamba's off-target movement, whether by physical drift as it was being sprayed or by post-application volatility. Earlier this year, Norsworthy was named a Fellow by the Weed Science Society of America, its highest honor, and won its award for top research in 2017.

Monsanto, now owned by Bayer, provided equipment and funding for the study and had representatives on-site during much of Norsworthy's test, which he called one of the largest of its kind in the nation. Norsworthy's experiments showed that the company's dicamba, called XtendiMax, moved off target at least 390 feet in four directions from where it was sprayed.

The company later questioned the validity of those results, according to the Oct. 5 email.

Bayer said Saturday that the UA study was among several that Monsanto helped fund and that its results were dramatically different from results of other tests. "This funding imposed no restrictions on the use or ownership of any data developed by these researchers," Bayer said in a statement.

Bayer also said the EPA "conducted an extensive review prior to issuing continued registration for Xtendi-Max and based its decision on all relevant science."

Others disagreed.

"The EPA's own scientists recommended a 135-meter buffer that was based on poring over scientific studies such as Norsworthy's," said Bill Freese, an analyst with the Center for Food Safety, one of several groups that have sued the EPA for its dicamba decision in 2016.

"They saw that as science-based, and that it would also give some protection to neighboring farmers," Freese said. "It's pretty incredible when you look at the final decision — 57 feet — that EPA higher-ups came through with. I don't see EFED scientists changing their minds, but I do think it's important to understand the scientists are under a lot of pressure."

Freese also noted that the EPA has asked for more information on off-target movement, dicamba's effects on other vegetation, pH levels in soils and other issues. "The EPA has approved these pesticides for another two years but, at the same time, they're saying there's so much that we don't know," he said.

POLITICS AND SCIENCE

Monsanto released dicamba-tolerant cotton in 2015 and dicamba-tolerant soybeans in 2016 without having yet gained EPA approval for a dicamba formulation that became XtendiMax. Monsanto didn't allow third-party independent testing of its dicamba product for volatility during that time.

BASF and DowDuPont also have dicamba formulations approved for another two years.

"It's more evidence of the EPA basing the decision on politics and not science," Steve Smith, agriculture director of Red Gold, an Indiana-based tomato processor, and chairman of the Save Our Crops Coalition, told the *Democrat-Gazette* by telephone.

"They seem to acknowledge what Jason was saying but, when it came time to actually publish, they took Monsanto's recommendations point blank," Smith said. "I can tell you 57 feet is nothing. I can tell you 110 feet is nothing. I live next to a soybean field, and that farmer did leave a 110-foot buffer, and my trees still got smoked."

In a Nov. 2 email to Norsworthy and other weed scientists, Bob Nichols, a scientist and senior director with the research and marketing group, Cotton Inc., wrote, "Our present experience and data suggest these new EPA guidelines do not significantly reduce the potential for off-target movement."

Norsworthy declined to comment on the email exchanges, but the UA Division of Agriculture issued a statement, saying its scientists have been asked for help several times by the Plant Board and the EPA.

"Bayer, the registrant, continues to challenge public data to the EPA," the UA said. "Questions about decision-making and the final label [for dicamba's use] are the EPA's to answer. We continue to stand behind our weed scientists. We don't have all the answers to the challenges of dicamba, and the herbicide's continued use makes it all the more critical that we ... continue our work in support of the safety of all Arkansas agriculture."

The EPA has been sued in federal court in Washington state over a study, alleged to inadequate, of dicamba's environmental effects on endangered species when it first allowed the herbicide's in-crop use. A couple of dozen lawsuits, including some in Arkansas, have been filed against dicamba manufacturers.

In Arkansas this year, farmers were supposed to stop spraying dicamba on April 16, a cutoff date set by the state Plant Board after receiving about 1,000 complaints of damage last year.

Monsanto and the other manufacturers attributed most of the problems to applicator error and implemented training programs that they say have reduced dicamba's off-target movement and the number of complaints.

While Arkansas had the only ban, other states adopted midseason changes to their regulations, with cutoff dates based on the calendar or on air temperatures.

Even with the April 16 cutoff, the Arkansas board received some 200 complaints, most in midsummer, leading officials to believe that some farmers in the state violated the ban. The board is in the middle of a process to determine how, or if, dicamba can be used in the state next year.

FIELD TESTS

Two Crittenden County farmers donated a 240-acre field for Norsworthy's volatility tests this summer.

A 38-acre plot of Monsanto's dicamba-tolerant beans was set in the middle of the field, with the rest of the acres planted in beans not dicamba tolerant. Post-spraying tests showed that, as many as 29 days after dicamba was sprayed on the 38-acre plot, non-dicamba soybeans hundreds of feet away had symptoms of dicamba damage. Even plants covered by buckets and tarps during, and shortly after, application showed various levels of damage.

Norsworthy provided his Crittenden County study to the EPA in mid-September, along with other studies conducted elsewhere in Arkansas and other states. He also presented his study to the Plant Board on Sept. 20.

Six days earlier, Bayer representatives canceled a previously scheduled visit with Norsworthy to look over the Crittenden County results. John A. Chambers, a Bayer representative, cited an "urgent conflict" in an email to Norsworthy to cancel the meeting.

In an Oct. 5 email, Mark Corbin, an Environmental Fate and Effects Division branch chief, asked Norsworthy to look over an internal draft prepared two days earlier. The draft said Environmental Fate and Effects Division's position on Oct. 3 was to recommend an "omni-directional" 60-meter buffer, or about 196 feet, for fields that may be near endangered species.

The 196-foot buffers, according to the draft, were "preliminary and contingent on the results of further evaluation" of Norsworthy's study in Crittenden County. The draft then noted that the scientists' subsequent study of Norsworthy's work "suggested that a larger buffer (135 meters) would be appropriate." A 135-meter buffer would be about 443 feet.

"However, some potentially confounding issues regarding this study were presented by the registrant as suggestive that the study was not reliable," the Environmental Fate and Effects Division wrote in its